"Alberta Transportation Study"

by LaBorde Simat

PROVINCE OF ALBERTA

MEMORANDUM DEPARTMENT OF INDUSTRY AND COMMERCE

OUR FILE NO.: 4-21

YOUR FILE NO.:

FROM: ADM Economic Development

TO: R.G. McFarlane
Deputy Minister

DATE: June 14, 1972

RE: LABORDE SIMAT LTD. - TRANSPORTATION STUDY

Attached are two copies of the above study received from LaBorde Simat on June 9th. In view of the urgency the Minister attaches to the development of a position paper on transportation, it will be necessary for us to digest this material over the course of the next two weeks. I would accordingly welcome your thoughts and comments, and those of the various branches of the department.

I have asked Jim Dinning to obtain further copies of the report for us and these will be made available on receipt.

see pp 86/7
89
168

E Stoutenburg
for D.J. McEachran

cc: T.R. Vant
D.I. Istvanffy
D.H. Sheppard
J.L. Snary
W.J.M. Wenzel

Transport Commission

E R R A T A

Page 5, misspelled "multi-modal"

Page 14, misspelled "interswitching"

Page 14, Section F., second paragraph - should read "four to fifty cents per hundredweight".

Pages 15 & 16, "6¢ rate" should read "6¢ rate per pound".

Page 65, first line, second paragraph - should read "five firms ..."

Page 75, third line, last paragraph - should read "with respect to".

Page 85, Illustration - misspelled "Line-haul".

Page 100, Table VII - solid line should come between Lloydminster and Medicine Hat, not between Medicine Hat and Claresholm.

Page 104, Footnote: "1 Canadian Pacific Railway."

Pages 106, 107, 108 and 109, "6¢ rate" should read "6¢ rate per pound".

Page 110, first line, second paragraph - should read "without embarking on a detailed analysis".

Page 127, Table XII, absence of column headings -

Calgary	Edmonton
14,105	7,380
10,950	6,755
......	.....

Page 131, second line, third paragraph - "expanded" should read "expand".

Page 171, last line - misspelled "should".

Page 178, sixth line - "effect" should be "affect".

Page 180, fourteenth line - misspelled "complement".

Page 198, second paragraph, should read "based on a review of some of the ..."

LaBorde
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LABORDE SIMAT LTD.

• 640 SEVENTH AVENUE S.W. • CALGARY 2, ALBERTA, CANADA • 403/263-1630

June 5, 1972

The Honourable F. H. Peacock
Minister of Industry and Commerce
418 Legislative Building
Edmonton, Alberta

Dear Mr. Minister:

In response to your original instructions we are pleased to submit the completed version of the Alberta Transportation Study. This study provides an overview of transportation as it affects Alberta and isolates those problems and issues which are deemed to be most critical in the Province's future transportation planning and development. Furthermore, the report provides recommended courses of action to resolve specific transportation problems and suggests areas for further study and research.

For the convenience of the reader an Executive Summary is provided at the outset of the study which outlines recommended transportation policy and action priorities for the Provincial Government to pursue.

Concurrent to this study LaBorde Simat Ltd. is also conducting a cross-sectional analysis of a limited sample of railway freight rates as they apply to Alberta. The purpose of this investigation will be to isolate rail freight rate problems so as to provide the Provincial Government with a more detailed indication of rate inequities prevailing on certain commodities in specified markets. The analysis will constitute a second volume to the study and will be submitted very shortly.

It should be mentioned that while this study discusses practical courses of action an area that requires careful consideration are the political implications of each action program. Needless to say, the Provincial Government is in a better position to judge this very delicate matter and should, therefore, insure that its transportation policy and its action programs are framed in such a manner so as to reflect important political issues of the day.

We wish to express our gratitude to the Honourable Minister for allowing our firm the opportunity to perform this very worthwhile study.

Yours very truly

E. H. LaBorde
per. [illegible]

E. H. LaBorde

President

EHL:cs

- ALBERTA TRANSPORTATION STUDY -

A STUDY SUBMITTED IN RESPONSE TO A
REQUEST BY THE HONOURABLE F. H. PEACOCK
MINISTER OF INDUSTRY AND COMMERCE FOR THE
GOVERNMENT OF THE PROVINCE OF ALBERTA

Prepared by:

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EXECUTIVE SUMMARY

1. Statement of Transportation Policy

It is recommended that the policy of the new Government of Alberta should be to:

(i) Support the development of transportation systems which will provide a broadened industrial base for the Province.

(ii) Support worthy capital projects by borrowing or raising funds through revenue bond issues.

(iii) To challenge, where necessary, Federal jurisdiction over transportation services which are deemed vital to the economic development of the Province.

(iv) Make every possible effort to inititate a Federal investigation into:

- (a) the determination of appropriate principles of rail rate making, and
- (b) the application of these principles to determine the lawful level and structure of such rates as they affect Alberta.

(v) Negotiate specific rates, fares, and services with the transportation industry on behalf of the economic and social interest of Alberta.

(vi) Develop and support an orderly system of truck regulations.

(vii) Develop and support research programs which will provide the travelling and shipping public of Alberta with the latest available transportation technology, including such elements as intermodal rates and services, commensurate with the needs of the Province.

(viii) Make transportation research a vital and continuing function within the Provincial Government.

2. A Considered List of Action Priorities

I Rail Freight Rates

(i) Every possible effort should be made to initiate a Federal investigation of rail rate-making as it affects Alberta. This would be a general investigation covering all rates, types of rates, conditions of application, etc. It should be broken down into two interrelated phases:

- (a) The determination of the appropriate principles of rate-making, and
- (b) The application of these principles, so determined, to set the lawful level and structure of rates as they affect Alberta.

Most of these specific rate problems discussed in this study should be subsidiary issues in this

investigation. This would include, for example, the structuring of long and short haul rates, the consideration of a different set of rates to apply on export and/or import traffic, the proper treatment of rate groupings, the relationship of rates on finished products to the rates on their constituent elements (raw materials), and the application of class rates in the absence of other rates and charges.

(ii) Given that the action recommended in (i) above is successful, even though it is a longer-term and more comprehensive solution to the rate problem, LaBorde Simat Ltd. recommends an immediate program of negotiations with the railroads for rate adjustments. As detailed in the body of this report, items of negotiation should include the following major issues:

(a) Long and short haul rate inequities on those specific commodities of considerable importance to the Province. Rates on westbound shipments to mainline points in Alberta should not be higher than rates on identical shipments to points beyond Alberta.

westbound ghi!

(b) Rates on finished products should not be so high as to discourage further processing

at points of origin in Alberta, e.g. the rapeseed case.

(c) The present system of applying rate increases has a profound impact on lower-valued commodities, especially on shipments moving over short distances. Exemptions should be sought from the present method of applying rate increases on any and all low-valued commodities where the effects may be to severely restrict Alberta exports, both domestically and internationally.

(d) A method should be developed for automatically triggering the institution of specific commodity rates or FAK rates in lieu of class rates where shippers can assure the carrier of economic quantities. The present system of class rates is highly restrictive to the development of new commodity trade.

(e) Where specific rate groupings are determined to be essential for the expansion of industry in smaller communities, such rate groupings should be negotiated using examples in Eastern Canada to support the application.

II Air Services

(i) Determine specific requirements for new domestic and transborder direct services. For example:

(a) Prepare a strong case for new transborder routes for consideration at the next Canada/U.S. bilateral negotiations.

(b) Attack transcontinental services and, in particular, the quota allowed CP Air which works to provide little or no competitive service on transcontinental flights.

(ii) Mount a determined effort to acquire clear jurisdiction over the certification of new intra-provincial air services. Where new or improved services are deemed essential to industrial expansion (including new oil and gas exploration) and the development of tourism, the Government should support air service applications from prospective qualified operators, on a subsidy eligible basis, if necessary.

Concurrently, the Government should support the financing of an orderly system of new airstrips, where adequate funding cannot be raised through other channels.

III Air Fares & Rates

The Government should take action to bring pressure to bear on a restructuring of certain groups of passenger air fares:

(a) Transatlantic fares are excessive by reasonable tests. Fares to interior points such as Edmonton and Calgary are high when compared to U.S. interior points.

If negotiation with the airlines and the Canadian Government fails, the Province might support greater competition from charter carriers operating in the same markets.

(b) Transborder fares are excessive, even considering the higher costs of passenger processing on international travel. The Government should seek lower joint fares in the major transborder markets where fare inequities appear to exist.

The Government should negotiate with Air Canada for extension of the present back-haul freight rate of 6¢ per pound on meat, machinery, and wearing apparel, where a minimum of 2,000 pounds are tendered, to a broader range of commodities with lower rate minimums.

IV Truck Regulation

(i) The Government should further regulate intra-provincial trucking.

(ii) The Government should seek to standardize vehicle weights and sizes to the highest possible levels. It should also promote licence reciprocity with other provinces and states in the U.S.A.

(iii) The Government should develop a position on the regulation of extra-provincial trucking operations.

V Financial Assistance

The Government should make strong representation to Ottawa for Federal participation in the funding of major capital projects required in the transportation sector. In addition, it should be prepared to borrow on its own account to support critical projects.

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SUMMARY AND CONCLUSIONS

In response to a request by the Honourable F. H. Peacock, Minister of Industry and Commerce, the firm of LaBorde Simat Ltd. has completed a study to identify major problem areas related to transportation and to determine how these problems might be rectified so as to enable the Province of Alberta to achieve a greater degree of social and economic development. The economic development of the Province is intimately related to the availability of an adequate transportation system and while there are other factors which may assist in the Province's growth, requiring study at a future date, this investigation reviews the role of transportaion in Alberta and its overall impact on the development of the Provincial economy.

There is an urgent need to broaden the economic base of the Province through industrial development and growth in tourism. A high degree of dependence upon the agricultural and petroleum sectors places the Province in a vulnerable position with respect to its future economic growth and stability. Moreover, it also exposes the Provincial economy to the effects

of political changes in its buyer markets. As an example, United States import restrictions on Alberta oil and natural gas or political differences with respect to Canada's major grain customers could severely limit Alberta's marketing potential.

Because of its position as a landlocked economy, Alberta is particularly dependent upon the availability of an efficient transportation system. Alberta is relatively isolated from necessary sources of raw materials, on the one hand, and from final consumption markets on the other. In order to broaden the scope of Alberta's export markets and to attract a greater degree of new industry, improvements in transportation are essential. In summary, improvements in transportation are critical to enhancing the industrial base of the Province.

Two elements which are of primary importance in nearly every aspect of transportation and which should become the topic of further research are the capital financing and Government organization needed to rectify existing problems and to implement new transportation technology.

In the past, the Provincial Government has typically

not borrowed large sums of money on a long-term basis but has financed capital projects, including transportation, out of current tax revenues. While this may have been practical in the past when the petroleum industry was thriving and the demand for Government services and facilities was perhaps not as great, this situation has now changed considerably. The petroleum industry can no longer be counted on to provide the needed revenues for the ever-increasing construction costs of providing an efficient transportation system. Furthermore, construction costs are generally increasing faster than the normal rate of inflation so that deferring major projects where a need can be proven to exist may simply make the project that much more expensive and perhaps impossible to accomplish.

The Province has now undergone a change in government as well as a realignment which places greater emphasis on the transportation function. It would, therefore, seem an ideal opportunity to adopt a new philosophy with respect to the financing of future transportation projects.

Based on the foregoing, it is strongly recommended that the Provincial Government seriously consider the following three avenues for financing transportation endeavors. First, the Province should

make strong representation before the Federal Government in an effort to attract greater participation by the senior level of government in the financing of major transportation projects. In the United States, for example, it is recognized that in major transportation projects the local municipalities and states simply cannot, as a fact of life, afford them. This has led to as much as 95 percent Federal participation in the funding of certain projects. Secondly, where transportation user charges could be expected to offset capital and operating costs the Provincial Government should consider obtaining the necessary financing through revenue bond issues. Thirdly, where the project is felt to be of major social and economic importance to the Province but where no revenue will be forthcoming in the form of user charges, the Provincial Government should consider borrowing directly (straight debt).

The second major point referred to related to the Government organization required to facilitate the development of an optimum transportation system. While this aspect lies outside the terms of reference of the immediate study, it is essential that the Provincial Government recognize the need for a Government agency which has the necessary capability,

both in terms of manpower and expertise, to implement needed changes and improvements. Because transportation is multi-modal it may be necessary to establish a single division with a number of sections within, each one assigned to a different mode. Each section, in turn, may then be divided into separate units to deal with rates, facilities, services and regulatory policy as these apply to each mode. In addition, separate sections will be required in order to conduct transportation research and to carry out the normal day-to-day business of the division.

While the foregoing provides only a very cursory examination of what such an organization would entail, it at least provides an indication of the important areas that must be considered if such an organization were taken through to its ultimate stage. The basis for this organization already exists in the form of the Transportation Research and Development Division. However, any further development of this body will depend to a good degree on the constraints imposed by the Provincial Government in terms of policy and budget allocation.

The findings and recommendations of this study are summarized below in terms of problem statements and

recommended action programs, ranked in order of priority. It should be mentioned, however, that while this study discusses practical courses of action little consideration has been given to the political implications of each action program. Needless to say, the Provincial Government should ensure that its transportation policy and its action programs are suitably tempered to reflect important political issues.

CARGO AND FREIGHT RATES

I Railway Freight Rate Problems

A. Long-Haul Versus Short-Haul Rail Freight Rates

In the West the railways often charge a higher rate for moving a given shipment over a shorter distance than they do for moving an idential shipment over a much longer distance. As an example, the railways may assess a higher rate for moving a shipment from Toronto to Calgary than they do for moving the identical shipment from Toronto to Vancouver. It should be noted, however, that this problem also exists where the relative distances are considerably shorter, perhaps 500 miles or less.

This is contrary to all rational principles of rate-making which state that while rates should be

compensatory they should also be reasonably related to the cost of providing the service. Other things being equal, under no circumstance should the cost of shipping a commodity over a longer distance be any less than moving the identical shipment over a much shorter distance.

This type of rate-making adversely affects the development of the Alberta economy in a number of ways. First, it penalizes established industry by forcing it to pay transportation costs considerably in excess of the cost of providing the service. Secondly, it restricts industrial expansion within the Province by limiting market size and diminishing potential profits. Thirdly, it raises the possibility that provincially-based industry will raise prices in local markets to offset the high transport costs incurred by buying and selling in distant markets. Finally, the long-haul versus short-haul rate problem exists throughout the prairie provinces which limits industrial expansion over the entire region. The result of this is that Alberta industry has less opportunity of buying or selling in markets any closer than Ontario.

The objective of the Provincial Government should be to initiate a revision of the entire freight rate

structure so that rates adequately reflect rational rate-making principles which dictate that rates should be reasonably related to the cost of providing the service.

Recommended Action Program: It is recommended that the Provincial Government prepare a detailed study which carefully outlines the long-haul versus short-haul freight rate problem. Using this study as supportive evidence the Province should then make application before the Federal Government to launch an investigation into the entire problem. The application should request a two-stage enquiry:

(i) The first stage should be aimed at determining the proper rate-making principles to be applied over the routes in question.

(ii) The second stage of the enquiry should be directed toward prescribing the specific level and structure of rates to be applied in the transportation markets in question.

Simultaneously, the Provincial Government should negotiate with the railways directly in an effort

to achieve specific rate reductions.

B. Application of Rail Rate Increases

In the past, the railways imposed rate increases in a manner which was detrimental to the long-haul shipper. The railways applied the same percentage rate increase to both the long- and the short-haul shipper which meant that the long-haul shipper was forced to bear a much greater dollar increase which in turn limited his ability to sell his goods in distant markets.

In apparent recognition of this problem, the railways have adopted a method under which they apply a scale of increases ranging from four to eight percent, whereby low-rated commodities bear the highest increases while high-rated commodities bear much lower increases. While this has removed some of the burden from the long-haul shipper, it has meant that certain low-value and low-rated commodities have had to bear increases approaching the eight percent level. This has a particularly severe impact on the Alberta economy because it imposes the highest increases to Alberta's primary industries at a time when the Province has not yet accomplished the transition from resources to secondary industry.

The objective of the Provincial Government should be to minimize the effect of any rate increase which will limit the movement of low-value goods into and out of the Province.

two sided coin - do we suggest greater % be borne by hi-value such already enjoyed processing adv.

Recommended Action Program: It is recommended that the Provincial Government seek specific commodity exemptions from the railways for low-value commodities, particularly over short-haul routings. Similtaneously, the Province should conduct informal discussions with the Railway Transport Committee to make them aware of the problem as well as its impact on the Alberta economy.

C. International Rail Rates

The United States offers some sizable markets for Alberta-produced goods. However, the railways often impose higher rates on commodities moving into United States markets than on identical shipments moving over comparable distances domestically. This limits the ability of Alberta-based firms to sell their goods in major United States markets and thus acts as a disincentive to the expansion of local investment and employment and places a ceiling on the Provincial tax base.

The goal of the Province should be to achieve rates on international movements of traffic which will

enable local producers to market their goods as freely in the United States as in Canada.

motherhood!

Recommended Action Program: The Provincial Government should demonstrate the magnitude of this problem to the Federal Government and seek needed rate adjustments on international traffic so as to facilitate greater export opportunities for Alberta-produced goods. Furthermore, the Province should consider the establishment of an export assistance program which would consult with potential marketers and inform them as to the rates, duties, and customs problems that they may encounter in international trade as well as the market prospects that await them in foreign lands.

D. Rates on Manufactured Goods Compared to Rates on Raw Materials

(1) The Question of Class Rates

Much of the traffic originating in Alberta is in the form of either grain or natural resources which carry a low per-unit value and thus move under relatively low rates. However, this type of commodity is generally more sensitive to rate changes, and it is therefore essential that these low rates be preserved in order to ensure their continued movement.

see p 13 re Crow Rate

Manufactured goods, on the other hand, carry a much higher per-unit value which means that they move under considerably higher rates. An examination of railway revenues indicates that the yield per ton-mile on carload quantities of class-rated goods is 5.71¢ which is comparable to truck yields where door-to-door services are provided.

Recommended Action Program: It is recommended that the Province attack the present high level of class rates on manufactured goods taking care not to affect the low rates prevailing on the movment of Alberta's resource commodities. The Provincial Government should present a case for negotiation with the railways which will cause commodity or F.A.K. rates to be implemented in lieu of the much higher class rates where shippers can quarantee a minimum volume of traffic over a specified period of time.

(2) Disincentives to Local Processing

It has been argued by both the Alberta and Saskatchewan Governments that the railways charge much higher rates on processed or manufactured commodities in order to recover costs on the movement of statutory grain and other natural resources. This is said to impede the development of manufacturing within Alberta because

it encourages processing of Provincial resources nearer to major buyer markets.

The objective of the Province should be to obtain lower rates on provincially manufactured or processed goods in relation to the rates prevailing on the constituent raw materials.

Recommended Action Program: It is recommended that the Provincial Government negotiate with the railways for rate reduction on finished goods leaving the Province. It is further recommended that the Province apply to the Railway Transport Committee for a complete investigation of the Crows Nest Pass Rate Structure.

E. Rail Rate Groupings

Under the present system of rate groupings, eastern centres which are located as far apart as Hamilton and Montreal are, in the case of many commodities, subject to the same rates while Alberta communities located only a few miles apart bear considerably different rates. The lack of such rate groupings in Alberta will impede the Provincial Government in its efforts to disperse industry throughout the Province and will encourage further industrial development in major centres where such development

may be looked on with some disfavour because of the pollution and industrial crowding it creates.

Recommended Action Program: The Provincial Government should examine the need for further rate groupings in terms of its policy respecting industrial dispersion. Wherever further rate groupings are deemed to be desired, the Province should negotiate with the railways for their implementation.

F. Interswitching Charges

Where an Alberta centre is served by two or more railways a charge may be imposed for moving freight cars between lines wherever the distance involved exceeds four miles. For the firm that lies outside the four-mile limit, this adds to the cost of marketing his product or increases the cost of needed inputs.

Interswitching costs may vary from four to fifty cents per hundredweight depending on whether it is an agreed charge or a class rate.

Recommended Action Program: While this is not considered to be a serious problem, the Provincial Government

should nevertheless pursue this issue with the railways in order to insure minimum application of interswitching class rates. Furthermore, the Province should include in its industrial information services a statement informing prospective firms as to the existence of interswitching charges, the range of such charges and specification of the four-mile limit.

II Air Cargo Rate Problems

The predominant flow of air cargo traffic in Canada is from east to west reflecting the fact that most manufacturing and processing is conducted in the East. This gives rise to an empty back-haul problem in the eastward direction.

In certain instances, the airlines have implemented low rates in the eastward direction in order to attract traffic from competing modes and thereby alleviate the back-haul problem. An example of this is the 6¢ rate per pound applying between Calgary and Toronto on the eastward movement of meat, machinery and wearing apparel. This rate is less than half that prevailing in the reverse direction, however, it applies only to shipments of 2,000 pounds and more.

The Provincial Government's role with respect to air cargo rates should be to encourage lower rates on goods manufactured in Alberta for which there is considerable potential in distant markets.

Recommended Action Program: It is recommended that the Provincial Government negotiate with the airlines for the inclusion of a broader range of Alberta-produced commodities under the 6¢ rate per pound. Secondly, the Province should question the 2,000 pound minimum to determine whether it can be lowered and thus bring the 6¢ rate per pound within reach of a greater number of Alberta based shippers. Thirdly, the Province should take action to protect the 6¢ rate per pound in order to insure that it is not increased at some point in the future. Finally, the Province should strive for lower through rates to major international markets.

AIR PASSENGER FARES

In certain instances, the air passenger fares prevailing on domestic and international flights serving Alberta are inordinately high when compared to those charged over comparable distances elsewhere.

This has a two-fold effect on the air traveller.

First, it penalizes the businessman who travels by air with a high degree of frequency and whose travel expenditures account for a major cost of doing business. Secondly, excessively high fares will place air travel out of reach of many travellers who might otherwise fly if fares were set at a lower and more reasonable level.

The Province's role should be to ensure that air passenger fares accurately reflect the cost of operating the service and are consistent with the fares charged over comparable mileages and routings elsewhere.

Recommended Action Program: Wherever air passenger fares are proven to be inordinately high, the Provincial Government should bring the matter to the attention of the Air Transport Committee. Where the airlines are reluctant to make needed fare adjustments, the Province should consider encouraging greater competition from the non-scheduled carrier operating in the same markets.

FACILITIES AND SERVICES

I Air Passenger Services

A number of deficiencies exist with respect to the level and quality of regional, transcontinental, and international air services at Alberta communities. Moreover, further deficiencies are likely to appear in the future as traffic volumes increase.

Lack of adequate air service can affect the development of the Province in the following ways:

(1) Limit the development of tourism.

(2) Limit the movement of traffic into major domestic and international markets with which Alberta shares a large community of interest

(3) Limit access into remotely situated centres in the northern part of the Province.

(4) Limit the development of smaller Alberta centres.

(5) Impede the development of newly emerging resource centres.

While the Provincial Government has limited jurisdiction

over aviation-related matters, it should nevertheless mount a concerted effort to convince the Federal Government and the airlines of Alberta's need for additional domestic services. Furthermore, where there is a recognized need for additional international and transborder services, the Province should develop the necessary documentation supporting such services and submit it to Canada's respective bilateral negotiating teams.

Recommended Action Program: It is recommended that the Province prepare the necessary evidence supporting the need for additional air passenger service and using this as a basis enter into negotiations with the airlines and the Federal Government to obtain needed improvements. As a longer term objective, the Provincial Government should seek expanded jurisdiction in aviation matters, particularly where they relate to intraprovincial aviation.

II Provincial Airstrip Development

There is a need to develop a system of airstrips within Alberta which would form part of the overall transportation network and which would act as a stimulus to industry, tourism and resource development throughout the Province.

The lack of a suitable network of airstrips will impede the Province's development in the following ways:

(1) Limit access at prospective resource areas.

(2) Impede industrial and commercial development at smaller communities.

(3) Limit the development of tourism.

(4) Inhibit access at isolated communities, particularly in Northern Alberta.

The Provincial Government's objective should be to achieve a suitable degree of airstrip development which fosters the social and economic development goals of the Province and which forms an integral part of other transportation networks, both nationally and regionally.

Recommended Action Program: It is recommended that the Provincial Government establish an airstrip development policy for the Province which incorporates the following objectives.

(1) Promote the development of prospective resource areas.

(2) Facilitate access at isolated communities.

(3) Promote the development of industry and commerce in smaller communities.

(4) Promote tourism at recreation areas.

(5) Promote social and economic ties between widely separated communities within the Province.

(6) Develop a system of airstrips which is fully integrated into other systems and modes of transportation.

(7) The creation of a single agency within Government which will coordinate the planning and financing of Provincial airstrip development.

(8) The creation of new sources of financing for airstrip development.

III Development of Air Cargo Services

Traditionally, air cargo has been thought of as a viable transport alternative only where high-value or highly perishable items were concerned. However, the advent of larger and more efficient jet aircraft promises significant reductions in line-haul costs.

The growth in air cargo holds a great deal of potential for Alberta-based firms because of their landlocked location and their distance from major markets. Because of significant cost reductions, it is likely

that in the future a broader range of Alberta-produced goods will be moving by air cargo which should create major opportunities for Alberta industry. Air cargo will provide a particularly suitable mode where time, warehousing, damage, perishability, and depleted inventories are critical factors.

Recommended Action Program: In light of the industrial opportunities offered by air cargo services, it is recommended that the Provincial Government pursue the following program:

(1) Initiate a program to alert Alberta-based manufacturers as to the advantages which air cargo may offer.

(2) Encourage Alberta firms to re-examine their distribution costs to determine whether air cargo offers a viable alternative to existing shipping methods.

(3) Encourage and promote coordinated ground-handling facility and access designs and concepts, capable of coping with projected cargo volumes.

(4) Encourage efforts towards eliminating the problem of clearing inbound shipments through Customs appraisal and other similar bottlenecks.

(5) Monitor air cargo services and demand and wherever markets are under-serviced bring this to the attention of the airlines.

IV Intraprovincial and Extraprovincial Highway Development

There are instances where highways inside and outside the Province are insufficiently developed to accommodate traffic needs or to enable ease of access to certain areas.

Lack of adequate highway systems will affect the Province thusly:

(1) Limit access to isolated areas such as Canada's northern economy along the Mackenzie River.

(2) Limit tourist traffic in certain areas of the Province.

(3) Limit motor carrier transport in certain areas of the Province which will detract from the industrial development potential of these areas.

(4) Limit trade and commerce between Alberta communities and centres lying outside the Province.

The objective of the Provincial Government should be to encourage the development of a highway system which facilitates growth in tourism, encourages industrial development in smaller communities and provides access to areas, both isolated and otherwise, inside and outside the Province.

Recommended Action Program: It is recommended that the Provincial Government first initiate a major improvement program to bring the Yellowhead Route through Edmonton up to a standard comparable to the Trans-Canada Highway. Secondly, the Provincial Government should prepare a study which examines the impact on the Alberta economy of an all-weather highway along the Mackenzie River. Using this study as a bargaining tool, the Province should then negotiate at the Federal level for an early construction start on this highway.

V Urban Transportation

Alberta's major urban centres are confronted with the dual problem of planning and financing expanded transportation facilities, particularly to meet the demands of rush hour traffic.

Lack of adequate financing and planning and the consequent underdevelopment of urban transportation

facilities could result in the following problems:

(1) Continued outward expansion in the suburbs, without adequate development of an inner transportation network or alternative approved policies for handling traffic (ring-roads).

(2) Low functional standard of most major streets.

(3) Insufficient river bridges and railway subway crossings.

(4) The eventual use of every local through street for non-local traffic.

(5) Failure to separate vehicular and pedestrian traffic.

(6) Traffic congestion through conflict with slow public transit.

(7) Low standard of aesthetic treatment.

Other problems that arise relate to the costs incurred by the public at large for delaying or postponing investment in needed transportation facilities. These include the economic costs incurred by the traveller due to increased travel time as well as the cost incurred for waiting caused by the effects over time of inflation on construction costs.

The objective of the Provincial Government should

be to ensure that sufficient resources are made available, both with respect to planning and financing, to enable the Province's major urban centres to undertake the development of transportation systems needed to meet their present and future traffic requirements.

With respect to the financing problem, there are three alternatives available to the Provincial Government

(1) Increase the level of Provincial grants to the urban centres.

(2) The Province could act as representative for the urban centres in applying for capital assistance from the Federal Government.

(3) The Province could go to the open market for additional funding through transportation bond issues.

Recommended Action Program: It is recommended that the Provincial Government examine the relative merits of financing under each different scheme. The Government should then choose an appropriate method or combination of methods which will provide the needed funding for urban transportation development.

With respect to the planning function the Provincial Government should consider the establishment of a Government agency to undertake research and planning in urban transportation. It is proposed that this group would work with similar bodies already in existence at the urban level.

VI Seaway and Port Development

While Alberta may be a landlocked Province, it is essential that it monitor seaway and port development in order to facilitate the uninhibited flow of its export traffic.

The lack of adequate seaway and port facilities and the levying of unreasonable tolls and charges will affect the Provincial economy in the following ways:

(1) Inhibit the efficient flow of Alberta export goods which will slow delivery and jeopardize the Province's competitive position in foreign markets.

(2) Slow delivery to export markets owing to a lack of alternate port facilities and sufficient handling capacity to accommodate traffic in the event of snow slide conditions in the mountains, labour disputes and other emergency situations.

(3) Add to the cost of moving Alberta-produced goods to foreign markets and thereby limit the competitiveness of Alberta based firms in those markets.

Recommended Action Program: It is recommended that the Provincial Government pursue the following program

(1) Negotiate with the National Harbours Board for further expansion of the port at Prince Rupert to alleviate congestion at Vancouver and provide an alternative for routing traffic to the West Coast.

(2) Negotiate with the National Harbours Board and the Vancouver Port Authority for further development of Roberts Bank to enable handling of a broader range of bulk commodities as well as general cargo and container traffic.

(3) Carefully evaluate any development affecting seaway operations to determine its impact on Alberta industry. If necessary, make representations before the St. Lawrence Seaway Authority in order to insure that Provincial interests are properly protected.

(4) Examine the need for Provincial representation on port and seaway authorities that are vitally important to Alberta's future trade development.

VII Discontinuance of Rail Passenger Service

The railways have taken action to discontinue rail passenger service at a number of Alberta communities which can adversely effect the social and economic development of these communities and consequently the Province as a whole.

The discontinuance of rail passenger service can limit a community's ability to attract industry and commerce and facilitate the ongoing operation of existing enterprise. In addition, it can limit social and economic exchange with other communities.

The Province's goal with respect to this problem should be to ensure that adequate rail passenger service is maintained where the public need requires the provision of such service.

Recommended Action Program: It is recommended that the Provincial Government adopt a policy which enables three courses of action. First, where discontinuance is proposed by the railways, the

Government should examine the implications of such action in terms of:

(1) The existing volume of traffic.

(2) The effect of discontinuance with respect to Provincial development goals.

(3) The social and economic impact on the community or communities involved.

(4) The availability of alternative passenger modes.

(5) The ultimate cost to the public.

If, after this, discontinuance is found to be unjustified and if subsequent representations by the Provincial Government prove unsuccessful, then the Province should ask for a commitment from the Federal Government to provide passenger service by an alternate mode. Alternatively, the Province should apply for the authority to subsidize the needed service unilaterally.

REGULATION IN THE MOTOR CARRIER INDUSTRY

I Motor Vehicle Weights and Sizes

The transportation industry has long sought standardization of gross vehicle weights on provincial and state highways. The Province of Alberta currently

has a fairly complex system of gross vehicle weights which is much more restrictive than in many of the other Canadian provinces. Alberta allows 74,000 pound gross loads only on designated highways while municipal roads are restricted to either 45,000 or 59,000 pound loads. In contrast, Manitoba, Saskatchewan and Nova Scotia have established permissible gross vehicle weights of 74,000 pounds on all provincial highways while Ontario has increased permissible weights to as much as 140,000 pounds.

The present Alberta highway weight restrictions result in:

A. High freight costs to the shipper and, ultimately, the consumer.

B. Restricted development of agriculture and secondary industry due, in part, to these higher freight costs.

C. Increased costs to the shipper and consignee in those areas served by highways with restricted weights, where rail lines have been or will be abandoned.

D. High cost of movement of goods and services as the transporter is required to maintain three fleets of equipment if he is to match the three highway gross weight levels.

The Government of Alberta should establish as objectives:

A. A standard and uniform system of permissible gross vehicle weights within the Province that will contribute to its economic stability and growth.

B.. Permissible gross vehicle weights on those highways serving interprovincial and international traffic that will permit the free movement of goods and services to and from Alberta on east-west and north-south corridors.

Recommended Action Program: It appears that Alberta's solution to the permissible vehicle weight problem should be:

A. To standardize permissible gross vehicle weights to 74,000 pounds on all Provincial highways.

B. To increase gross vehicle weights on municipal, district, and county roads that form part of the road transportation network serving Alberta's industrial base, to the provincial highway weight standards.

C. To increase gross vehicle weights on these east-west and north-south Alberta highways to the permissible weights applicable on the highways in the major

industrial areas of Canada, i.e. Ontario.

II The National Transportation Act - Part III

A. Extra-Provincial Motor Vehicle Undertakings

The fragmented nature of the administration and regulation of the extra-provincial highway transport industry results in considerably higher costs than could otherwise be achieved if control fell under one regulatory body. For example, a carrier wishing to service traffic between Alberta and provinces such as Saskatchewan, Manitoba, Quebec and Ontario must obtain proper operating authority from each province. This inevitably requires a public hearing which can be very costly and time consuming.

Similarly, rates applying on the extra-provincial movement of freight are regulated in a totally disharmonious fashion by each of the provinces. This again imposes higher costs on the industry and limits its ability to operate efficiently.

Regulations as may be promulgated under Part III respecting extra-provincial motor vehicle transport will warrant consideration by the Province of

Alberta inasmuch as they will have a significant bearing on the costs of procurement and marketing of goods by Alberta industry.

B. Intra-Provincial Regulation of Highway Transport

The lack of regulations in Alberta's motor carrier industry has resulted in excessive competition and non-compensatory rate structures which have in turn given rise to the following problems.

1. High bankruptcy rate for motor carriers within the Province.
2. Unsafe equipment.
3. Lack of reserves to replace equipment due to inadequate rate levels.
4. Lack of stability in the industry.

It would seem advantageous for Alberta to adopt a regulatory policy for intra-provincial highway transport which would be consistent with the regulations that will develop with respect to the extra-provincial highway transport industry. Such action would assist in the achievement of a more stable and efficient motor carrier industry which would facilitate the ongoing development of secondary industry within the Province.

Recommended Action Program: It is recommended that the Provincial Government adopt a set of regulations governing intra-provincial motor vehicle transport that would be consistent with the regulations proclaimed under Part III of the National Transportation Act. It is envisioned that these regulations would incorporate the following elements.

1. All carriers would require operating licences (operating authorities).
2. Provision would be made for temporary operating permits.
3. Terms and conditions of licences would be specified.
4. Required cargo, public liability and accident insurance.
5. Carriers would be required to file tariffs or tolls.
6. Provision for tariff bureaus.
7. Overseeing of transfers, mergers, consolidations, and licensing or other change of control.
8. Standard accounting and operating statistics information and reporting.
9. Conditions of carriage for goods and passengers.
10. Conditions for the carrying of C.O.D. shipments.

11. Safety standards
12. Enforcement and penalty procedures.

III License Reciprocity

Licensing reciprocity systems are characterized by an exchange of operating privileges, whereby one jurisdiction allows vehicles registered in another jurisdiction to operate within the limits of its territory and, reciprocally, the other jurisdiction grants the same privileges.

The major problems with respect to licensing reciprocity are as follows:

A. The extreme difficulty of Alberta carriers in obtaining I.C.C. operating authority in the United States to permit free movement of goods to and from Alberta by Alberta carriers or to create a land transportation corridor to the Western seaboard through the United States.

B. The lack of any type of reciprocal arrangement with the Province of British Columbia. This situation can only impede the free flow of goods and services to and from the Western seaboard on Canadian land routings, due to a lack of competition.

The Province should have as an objective acquiring and maintaining license reciprocity plus the accompanying reciprocal arrangements on operating authorities with all the provinces of Canada as well as all states in the U.S.A.

Recommended Action Program: It is recommended that reciprocal agreements be reviewed on a regular and continuing basis in order to meet changing patterns in markets and traffic. Also, a detailed study should be conducted every five years to evaluate trends and formulate future policy.

IV Fuel Tax Administration

A fuel tax represents a charge payable to a province for the use of that province's roads and highways. However, some provinces such as British Columbia levy a tax based on road use in lieu of the fuel tax.

The major concerns with respect to fuel taxes are as follows:

A. The province's inability to collect and audit the fuel taxes due from sales made within their province and taxes due from the transportation industry's use of provincial roads, regardless of where the fuel was purchased.

B. The transportation industry's attempts to pay taxes to the provinces based on road use only, in order to avoid double taxation.

Recommended Action Program: It is recommended that the Provincial Government seek to achieve a greater degree of standardization with the other provinces with respect to the method of assessing and collecting taxes based on road use only. Standardization would resûlt in the following benefits:

A. Lower costs to the carriers and governments.

B. Tax collecting and auditing would improve.

C. Encourage accurate reporting by the industry.

D. Improved accuracy because of standardized reporting.

E. Eliminate the Government's dependency on the transportation industry's documents to audit fuel tax collection.

TRANSPORTATION RESEARCH

I Organizational Considerations

There are three alternative ways in which the transportation research function can be accomplished. First, the Provincial Government can retain private consultants to carry out the bulk of the research.

Secondly, the Government can shift their research burden to the universities located within the Province. Thirdly, the Provincial Government can carry out research within the Transportation Research and Development Division or some similar body.

It is recommended that the Provincial Government adopt an approach which incorporates all three elements. Under this system it is contemplated that the research function would be divided in the following manner. First, there will be a need for a government body to isolate problem areas, develop research projects, set up terms of reference, and conduct a portion of the research. Secondly consultants will be retained to conduct specialized studies which require a large time and staff commitment. This will minimize the full-time staff requirements of the Government and allow existing staff the necessary time to carry out routine matters in transportation. Thirdly, the resources of the universities will be brought to bear where new technology and new analytical techniques are involved.

II <u>Partial List of Recommendations for Further Study</u>

A. <u>Further Transportation Studies</u>

1. A study to investigate in detail the

discriminatory freight rate and passenger fare structures which affect Alberta.

2. A study to review the present and future needs of Alberta communities for improved air services and facilities.
3. A thorough review of the Grains Group study.
4. A study to examine the need for further highway development both inside and outside the Province.
5. A study to review the present regulatory framework governing truck and bus operations inside and outside the Province.

B. <u>Broadening of the Research Base</u>

1. A study to investigate problems which may require corrective action in other areas outside the transportation element.
    (a) The availability of capital at competitive interest rates.
    (b) The supply and location of skilled labour.
    (c) The quality of life, education, housing, health, cost of living, recreation, and community of interest.
    (d) Barriers to entry.

(e) Prospective trade opportunities between Alberta and major foreign markets.

(f) Other industrial location factors.

2. A detailed study to prepare alternative industrial incentive programs and one recommended program which would stimulate new industrial development within the Province.

CHAPTER I

INTRODUCTION

In December 1971 LaBorde Simat Ltd. was requested by the Honourable F. H. Peacock, Minister of Industry and Commerce, to broadly examine transportation as a necessary means to the social and economic development of the Province of Alberta and to determine in this respect those problems in the transportation sector which are impeding the industrial development of the Province.

In response to the Minister's request, this study attempts to present an overview of the identification of specific transportation problems.

The pervasive nature of the transportation element will give rise to certain problems in nearly every phase of Alberta life. However, this study confines itself primarily to major problems which have persisted over a number of years and which have inhibited the proper development of the Alberta economy. These include (1) chronic rail freight rate problems, (2) inequitable air passenger fares and

cargo rates, (3) inadequate facilities and services in all modes and (4) basic regulatory problems in the transportation industry.

There are specific areas that have not been considered within this study either because they do not pose a major problem at this time or because they have an indirect or minor impact on the Alberta economy. Pipelines, for example, have not been included as a major problem simply because industry has in most cases managed to keep pace with changing technology and the need for added capacity. While the advent of solids pipelines promises much for the future, this aspect of transportation is still very much in the research stage and does not pose any immediate problems of major significance.

Containerization, on the other hand, promises to facilitate easier and lower cost handling of cargo and freight and while certain bottlenecks will likely arise as this technique develops, it cannot at this stage be considered a major or longstanding problem. Similarly, the development of truly intermodal services and rate structures promises significant time and cost savings and therefore should not be considered as a problem but rather as a means for

rectifying certain difficulties where two or more transportation modes are involved.

Another area that has not been covered in this study relates to maritime shipping and the facilities, rates and routings associated with this mode. While certain problems do exist in this area, they are not considered to be as pressing as certain other problems such as those associated with the inland portion of the journey or port facilitation.

As a subsequent step we present for the Government's consideration, a recommended transportation policy with ordered priorities. This ultimately stems from our recommended set of action programs.

With the aid of a mail questionnaire which was conducted in three stages, LaBorde Simat Ltd. has, it believes, identified and defined the most significant transportation problems facing Alberta. The questionnaire was used as a basic means for determining those problems which are of major importance and each problem is demonstrated, or illustrated, largely through the use of examples. Next, we have indicated the general impact of each problem on the Province in its efforts to achieve

greater development in the area of secondary industry. We have recommended a goal/or series of goals, as the case may be, that may serve as targets for provincial policy in the amelioration or at least the partial elimination of the problem. The study then suggests alternative courses of action available to the Government in the pursuit of its objective or target. Finally, with respect to each problem area, LaBorde Simat Ltd. has recommended an action program from among its considered set of alternatives.

Many of the specific problems identified are actually couched in a broader and more generic problem. Consequently, a number of specific problems discussed in the study warrant similar analysis and indicate a need for virtually identical policy and action programs. This is particularly true in the area of rail freight rate problems.

The final subject of the immediate study involves a statistical analysis of rail freight rates. This rate analysis will not produce statistically significant results since the sample does not represent a comprehensive cross-section of the total universe of rates. However, it is designed to probe the world of rates applied to Alberta users of rail

services in an attempt to isolate certain structural rate inequities. The primary comparisons are with eastern shippers of like commodities over similar distances. Through this analysis we hope to specify real inequities and provide the government with a quantitative analysis which is both persuasive and demonstrative of the problem, even if at this point further rate analysis may be indicated in order to broaden the rate sample so that the analysis is extended in terms of its representation of all rates and rate conditions.

The statistical rate analysis is the subject of Volume II of this report which is bound under separate cover.

The Role of Transportation

It is important to recognize the integral role that transportation plays in industrial and social development within the Province of Alberta, or within any economically developing society. Transportation adds an important dimension to Alberta life by enabling us to maintain access between communities and thereby stimulate social and economic exchange within the Province. Similarly, the transportation element enables us to establish relationships with

other parts of Canada and the rest of the world and thereby provides the basis for expanded opportunities in commerce, industry, tourism, and cultural enrichment. It is obvious, therefore, that a transportation system is not an end in itself but rather a means for achieving desired social and economic goals. It is a part of the ongoing yet ever dynamic process of social and economic development.

Industrial Development in Perspective

For several years now agriculture and mining have occupied an important position in the Alberta economy, with these two sectors accounting for over 50 percent of the net value of production in the Province (Table I). The major contributor, of course, has been the petroleum industry which in 1971 accounted for $1,475 million worth of oil and natural gas production or about 96 percent of the total value of mineral production in the Province.

TABLE I

NET VALUE OF PRODUCTION BY INDUSTRY

ALBERTA, 1971

	$ '000	Percentage
Agriculture	600,000	15.4 %
Mining	1,530,000	39.2
Electric Power	113,000	2.9
Manufacturing	750,000	19.2
Construction	900,000	23.1
Other	11,000	0.3
	3,904,000	100.0 %

Source: Alberta Business Trends (January 1972), Alberta Bureau of Statistics

It is apparent that the provincial economy has become very dependent upon petroleum and agriculture which suggests that it is also vulnerable to whatever difficulties these two sectors may encounter. It would appear, therefore, that as a first consideration that provincial transportation policy be directed toward broadening the Province's industrial base while at the same time improving the opportunities for existing industry.

When a Province relies heavily on one or two sectors of economic activity as Alberta does, a slowdown in either sector can have a pervasive impact on the provincial economy. In 1971 agriculture accounted for over 15 percent of the net value of production

within the Province. However, between 1968 and 1970 farm cash receipts from crop production declined by over $123 million reflecting a drop of one-third from 1968 levels.

When an industry of such major proportions suffers a decline other sectors of the economy feel the effects as well. In fact, between 1969 and 1970 consumer spending in the Province actually showed a slight decline, partly a reflection of the slowdown in agriculture.

With regard to the petroleum sector, drilling activity in the Province has slowed considerably. According to Oilweek magazine (December 6, 1971 edition) during the first ten and one-half months of 1971 a total of 817 exploratory wells were drilled in the Province compared with 854 during the same period in 1970. Coupled with this is the fact that rig activity in the Province has showed a sizable decline since 1969. The major reasons for this decline have been an unstable investment climate coupled with a shift of interest to the Arctic and East Coast regions.

This is not to suggest that the petroleum and agricultural sectors are on a permanent decline

but only to illustrate the sensitivity of a predominantly two industry economy. While Alberta will retain an important position in petroleum and agriculture, recent events would suggest that the Province should be expanding and diversifying its industrial base in order to mitigate the effects of any setbacks which these two sectors may encounter and to set the Province on a path toward stable long-run economic growth.

A comparison with national employment figures indicates that secondary industry occupies a rather minor position with respect to other industries in the Province. As an example, in 1970 employment in the Alberta manufacturing sector accounted for only 11 percent of total non-agricultural employment in the Province compared to a national average of 25 percent. These figures indicate that manufacturing activity in the Province is well below the national average and one of the purposes of this study is to determine whether problems in the transportation sector may be contributing to this under-achievement.

The Alberta manufacturing sector is composed predominantly of firms operating on a relatively small scale. In fact, according to Statistics Canada in 1968 there were 1,822 manufacturing establishments

in the Province employing 49,759 people which means that in that particular year there was an average of 27 people employed by each manufacturing firm. It is interesting to compare this to a more highly industrialized area such as Ontario where in the same year there was an average of 63 employees per manufacturing establishment.

Similarly, there was a marked disparity in the "value of shipments"[1] of Alberta manufacturers when compared to their Ontario counterparts. In 1968 the average Alberta manufacturer accounted for value of shipments slightly exceeding $0.9 million while the Ontario manufacturer accounted for almost double this amount at $1.7 million.

The major reasons for Alberta's rather limited involvement in secondary industry are at least twofold. First, the local market by itself is not of sufficient size to support a large manufacturing sector. Secondly, major markets and suppliers are located a considerable distance away in Eastern Canada, the United States, and elsewhere in the world which means that transportation becomes a limiting factor in a corporation's industrial location analysis.

1 "Value of shipments" in this case refers to value of goods of own manufacture.

A desire for greater growth and stability in the Alberta economy would indicate a need for further development in the secondary sector. However, in order to achieve this objective it will be necessary to gain better access to markets and suppliers lying outside Alberta and even attract such suppliers into the Province. This in turn suggests a need for a transportation system in which rate structures, facilities and levels of service are conducive to the freer movement of raw materials and finished goods.

Tourist Development

Another sector that offers considerable opportunity for development is Alberta's tourist trade. In 1970 estimated travel spending in the Province amounted to close to $300 million which was over 40 percent higher than three years previous. Vacation travel accounted for about one-third of the 1970 total while personal and business travel made up the balance.

In spite of the economic potential from tourism, Alberta has for some years now been incurring a balance of payments deficit on vacation spending. This means that tourist spending by Albertans

travelling outside the Province has exceeded the tourist income flowing into the Province. This is partially attributable to Alberta's remote location.

Improved air and surface transportation would facilitate the freer movement of tourist traffic into Alberta's many vacation areas and create the needed demand to justify further investment in tourist facilities throughout the Province.

CHAPTER 2

A TRANSPORTATION SURVEY

In order to assist the research team to identify transportation problems quickly and efficiently, a confidential survey was conducted of industries located inside and outside the Province as well as leaders in Alberta communities having a population of 1,500 or better. The objectives of the survey were threefold:

(1) To determine how and to what extent the transportation factor is affecting the development of secondary industry within the Province.

(2) To determine how the transportation factor is affecting social and economic development at communities throughout the Province.

(3) To determine why major manufacturers located elsewhere have not established plant facilities in Alberta and if, in fact, transportation is a major consideration.

The results of the different surveys provided a useful tool for delineating the various transportation problems as they affect the Province. Moreover, the frequency with which each problem was cited provided an approximate means for weighting the

relative importance of the different problems. This proved useful in developing the analysis at a later stage of the study in which each problem was considered in much greater detail.

The response to the survey was most satisfactory and provided an indication of how the transportation factor is influencing development within the Province. However, due to the limitations surrounding this overview study, the samples in the surveys were necessarily small. LaBorde Simat Ltd. suggests that this survey research program be later expanded to include many more firms and community leaders, and possibly to include more items of information in the questionnaire. The survey results achieved to date provided a great deal of useful information about specific prospects or candidate industries for the Province to consider recruiting.

1. Survey of Alberta Based Manufacturers

A questionnaire was circulated to 100 manufacturers located throughout the Province of which 44 replied. (A copy of the questionnaire appears in Appendix A). Of those that replied 26 indicated that they market fifty percent or more of their products within Alberta. This suggests that a large proportion of

provincially-based manufacturers are oriented toward the local market. Of the remaining 18 firms the majority indicated a strong orientation toward outside markets. In fact, over three-quarters of this latter group indicated that they market 75 percent or more of their products outside the Province.

Of the firms marketing predominantly outside the Province it is interesting to note the type of manufacturing in which the majority are engaged. Fifty-five percent are involved in food processing, chemical manufacturing or the production of forest products while twenty-five percent are engaged in the production of plastics and wearing apparel. This would suggest that Alberta offers a definite locational advantage for those types of manufacturing which depend on the petroleum, agriculture and forest sectors for their inputs. It also suggests that Alberta may be a suitable location for the production of high-value manufactured items.

In the questionnaire the firm was asked whether the transportation factor limited its ability to market its product, or if the cost of transporting inputs added unduly to the cost of manufacturing. The responses were as follows:

<u>Q. 10</u> Do you feel that your firm's ability to market its product is being unduly restricted by the transportation element?

Firms answering Yes	22
Firms answering No	22
No response	0

<u>Q. 17</u> Do you feel that the cost of transporting these inputs adds unduly to the cost of manufacturing your firm's product?

Firms answering Yes	20
Firms answering No	21
No response	3

In the case of both questions there was almost an even response between <u>Yes</u> and <u>No</u> answers. Nevertheless, an affirmative response of fifty percent suggests that some major problems do exist in transportation as it affects industry within the Province.

A further investigation revealed other interesting findings. Of the 22 firms that answered <u>Yes</u> to Question 10, 68 percent of this group market fifty percent or more of their products outside the Province. Similarly, of the 20 firms that answered <u>Yes</u> to Question 17, 65 percent obtain one-half or more of their inputs from outside the Province. This

certainly suggests the existence of problems in the area of long haul transportation.

If a firm answered Yes to Questions 10 or 17, they were asked to indicate what factor or combination of factors was likely the major cause. In both cases freight rates were cited most often as the basic problem.

To obtain a more detailed understanding of the transportation problem the firms were also asked to elaborate on specific issues. The following summarizes some of the major problems discussed in the questionnaire. It is noteworthy that the majority of the rate problems mentioned in the questionnaire were related to the railway mode while most of the regulatory problems were associated with the trucking industry.

A. Freight Rates

(i) Rate Increases: A number of firms indicated that the manner in which rate increases were being applied restricted market size and led to a deterioration of profits. One firm in particular stated that "with Alberta being at the apex of the freight rate structure, percentage increases distort established differentials between Alberta industries

and their competition in other provinces."

(ii) <u>Long Haul Vs. Short Haul Rates</u>: Reference was made to the fact that rates on traffic moving from Eastern Canada are often higher to Alberta points than to Vancouver which is a considerable distance further. Moreover, the survey revealed that this sort of problem also exists where the relative distances are much shorter.

(iii) <u>Freight Rates Restricting Market Size</u>: A number of Alberta manufacturers indicated that the high freight rates prevailing on their products tend to limit their ability to compete in major markets such as Eastern Canada. For instance, a food processor that markets 90 percent outside the Province stated that on the same product the cost of shipping to Eastern Canada is higher than the rate prevailing on westbound shipments.

(iv) <u>Rates on Light/Bulky Goods</u>: Concern was expressed over the relatively high rates which apply on the movement of light, bulky shipments such as farm equipment. One manufacturer was of the opinion that trucking firms should "establish a more reasonable method of applying cubic rates."

(v) Circuitous Routing by Railways: An Alberta based lumber producer indicated his inability to compete effectively in the Western United States because of the circuitous routing used by the railways in moving goods into this market. "The western market area of the United States ... is not competitive to Alberta producers of lumber due to the railroads not shipping cars via Cranbrook and Yahk, B.C. to Spokane, Washington but rather by Portal, Saskatchewan or Emerson in Manitoba for points further south and then into the Southwestern United States. The Portal or Emerson routes mean back-tracking to California on the U.S. railroads sending freight rates higher. The B.C. producers of lumber on the Pacific Great Eastern are more competitive as the lumber cars flow directly down the West Coast of the U.S. by Vancouver, B.C."

	Min. Wt. In Lbs.	Rate in Cents/CWT.
Sentinel, Alta.-Los Angeles	70,000	278
Prince George, B.C.-Los Angeles	70,000	167

(vi) Interswitching Charges: A major Edmonton based manufacturer stated that "the interswitching charge penalty for being just outside the four-mile limit is unreasonable." Reference was being made to the fact that where a centre is served by two or more railways a charge is levied for switching between lines where the distance involved exceeds four miles.

B. Facilities and Services

(i) Lack of Railway Rolling Stock: Two major Alberta firms, one a fertilizer producer and the other a forest products manufacturer, expressed concern over a lack of suitable rail cars to transport their finished products.

C. Regulatory Policy

(i) Lack of Reciprocity and Standardization of Trucking Operations: A number of the firms surveyed indicated that a major problem was a lack of reciprocity and standardization on licencing and fuel taxes for trucks moving outside the Province.

(ii) Restrictive Gross Vehicle Weights: It was indicated that because of low gross vehicle weight restrictions within the Province, producers were being forced to pay higher transport costs.

2. Survey of Alberta Communities

To determine how the transportation factor is affecting communities within the Province a questionnaire was circulated to the mayors and Chambers of Commerce in centres having a population in excess of 1,500 people. In total 100 questionnaires

were sent of which 48 replied indicating a very satisfactory response rate. (A copy of the questionnaire appears in Appendix B).

A considerable number of the communities surveyed indicated that rail passenger service had either been reduced or discontinued. This, of course, has resulted from the railways' policy to withdraw service wherever it is not considered to be economically justified due to lagging passenger demand. Recent examples of such action were the May 31, 1971 decisions of the Railway Transport Committee authorizing discontinuance of rail passenger service between Calgary and Camrose, Calgary and Lethbridge and Lethbridge and Medicine Hat.

In a number of instances the withdrawal of rail passenger service was considered to be an inconvenience to residents within the community. While perhaps not a major problem this would suggest that in the future whenever application is made by the railways to reduce service a review be undertaken to determine the social as well as the economic implications of such action.

The inadequacy of rail passenger and freight services at a number of Alberta communities suggests a need

to develop alternate transport modes. In fact, it is noteworthy that a large number of the communities surveyed expressed a desire for improved air service. A number of others indicated that community airstrips were inadequate and three communities actually suggested that Federal Government assistance should be made available for the up-grading of facilities.

With regard to air services and facilities, it is instructive to note some of the comments of the respondents.

> "Airport not satisfactory ... discourages air service and many private aircraft."
>
> "A new airstrip should be located nearby present strip - Lands and Forests airstrip not large enough for larger aircraft."
>
> "... no scheduled airline service and this would be a definite asset ... provided that the service is by an established carrier."
>
> "Grant from the Federal Government to up-grade municipal airport in order that commercial airlines could use facility."
>
> "Air transportation greatly needed in this community to serve the vast number of oil firms and private needs of community members ..."
>
> "Jet port facilities would guarantee greatly increased tourist promotion as well as potential industrial development."

The foregoing indicates the need for the Provincial Government to review the requirements of Alberta communities with respect to air services and facilities. Particular attention should be paid to the needs of northern communities where access may be a problem and resort areas such as Banff and Jasper where the provision of air services would act as a definite stimulus to tourist traffic. In addition, consideration should be given to the development of airports in smaller communities throughout the Province where such facilities would act as a definite stimulus to local industry.

3. <u>Survey of Eastern Based Manufacturers</u>

A questionnaire was circulated to 50 Ontario-based manufacturers to determine why they had not established plant facilities in the Province and whether or not the transportation factor dictated against an Alberta location. (A copy of the questionnaire appears in Appendix C).

Of those firms that replied the majority indicated that they market the biggest share of their product in Eastern Canada. An exception was a Toronto-based sports wear manufacturer that markets over 60 percent of its product in Western Canada.[1]

1 It is interesting to note that over 40 percent of this company's sales in Western Canada are in Alberta.

Close to two-third of the respondents showed a preference for an eastern location because of the larger market and the economies of scale that are possible with a one-plant operation.

Interestingly enough, five firms indicated that they had considered or were considering Alberta as a plant location. An eastern based furniture manufacturer stated that plant expansion into Alberta would be an eventual necessity because of the excessive freight costs for moving their product into the Province and the effect that this has on their ability to compete in the Alberta market. Another firm, a major chemical manufacturer, indicated an interest in the Alberta location because of its potential as a raw material source. The same sentiment was expressed by a pet food manufacturer who looked on Alberta as a source of cheap labour and fuel. However, in both instances their interest was tempered somewhat by a concern over local market size. Still another firm, a manufacturer of business forms with a sales volume in excess of $20 million, felt that an Alberta plant location would enable them to better serve their western customers and reduce distribution costs. It is noteworthy that an eastern electronics manufacturer felt that one advantage that Alberta offers

is the absence of a provincial sales tax.

A number of firms indicated that the transportation factor was an important reason for not establishing in Alberta. One firm gave as a reason, "our major source of raw material is in the East along with our major market ..." Another stated that it was the "high shipping charges for both raw materials (not available in Western Canada) and finished goods."

Throughout the survey the overriding consideration favouring an eastern plant location appeared to be the proximity of major selling markets and raw material sources.

CHAPTER 3

ANALYSIS OF TRANSPORTATION PROBLEMS

The remainder of the study is devoted to an identification and definition of the most significant transportation problems which are considered to impede progress toward greater industrialization within Alberta. Problems are demonstrated by way of example, and for each there is a statement about its impact upon the goals of the Province. Alternative courses of action available to the Provincial Government are described; and finally, a recommended course of action is presented which is in consort with the Government's overall transportation policy.

The survey material formed the primary basis for selecting those issues which we believed warranted specific attention in this initial study. Consequently, as discussed in Chapter 1, not all of the possible problem areas or transportation issues within each mode of transport are explicitly considered in this initial study. Rather, the purpose of the study is to quickly identify the set of specific issues or problems requiring immediate action on the part of the Provincial Government. To this extent, the survey became a

most useful tool for identification and assessment.

In isolating the most important issues it was necessary first to examine the transportation element in terms of its role in provincial development. As stated previously, the Province is presently very dependent upon petroleum and agriculture for its economic livelihood and it is essential, therefore, that the industrial base is broadened by developing opportunities in manufacturing and tourism.

However, the local market for a number of secondary industries is quite limited. In Table II an analysis is made showing the 1968 population per manufacturing establishment both in Alberta as well as nationally. From this analysis some indication is provided of those industries which should be capable of surviving on the local Alberta market alone and those that require a much broader market. A striking example of the latter is the petroleum and coal products industry which nationally accounted for 218,358 people per manufacturing establishment. Provincially, however, this sector accounted for only 101,733 people per establishment which suggests that the petroleum and coal products industry requires

TABLE II

POPULATION PER MANUFACTURING ESTABLISHMENT

ALBERTA AND NATIONALLY - 1968

	Canada		Alberta	
	No. of Est.	Popn./Est.	No. of Est.	Popn./Est.
Food & Beverage	6,361	3,261	482	3,166
Tobacco	30	691,467	-	-
Rubber	104	199,462	4	381,500
Leather	513	40,437	9	169,556
Textile	967	21,452	22	69,364
Knitting	342	60,655	3	508,667
Clothing	2,282	9,090	22	69,364
Wood	3,477	5,966	229	6,664
Furniture & Fixtures	2,300	9,019	112	13,625
Paper & Allied	635	32,668	20	76,300
Printing & Publishing	3,600	5,762	225	6,782
Primary Metals	405	51,220	22	69,364
Metal Fabricating	3,983	5,208	216	7,065
Machinery	795	26,093	43	35,488
Transportation	871	23,816	63	24,222
Electrical Products	689	30,107	16	95,375
Non-metallic Minerals	1,260	16,463	103	14,816
Petroleum & Coal	95	218,358	15	101,733
Chemical	1,124	18,456	41	37,220
Miscellaneous	2,810	7,382	175	8,720
Total	32,643		1,822	

Source: (1) Canada Year Book, 1970-71

(2) The Canadian Almanac.

a much larger market than Alberta can provide. In other sectors such as clothing and electrical products, just the reverse is true. In these industries the population per establishment is much greater provincially than it is nationally which would suggest that the local Alberta market is by itself capable of supporting these manufacturing activities. Furthermore, this latter group is likely more capable of undergoing considerable expansion provincially.

While transportation problems may exist for both types of industry the latter group should, other things being equal, be typical of those with the greatest propensity to locate or expand within the Province.

The Province's success in achieving a desirable degree of development will largely depend upon the ability of local industry to gain economic and efficient access to larger markets. Alberta is landlocked and situated a considerable distance from North America's major markets which means that desired levels of industrial development will not be achieved if transportation remains an inhibiting factor.

The survey provided a good initial identification of transportation problems which are restricting provincial development. However, in developing a set of transportation issues for inclusion in this study, other criteria were used as well. For example, the Canadian Industrial Traffic League, which represents the interests of industrial consumers of transportation services was asked by LaBorde Simat Ltd. to indicate what they considered to be the most pressing transportation issues. In addition, an intensive review and evaluation was undertaken of numerous briefs and submissions prepared by government and industry relating to various transportation problems.

The following priorities represent a detailed assessment of a broad spectrum of opinion on transportation problems. They also reflect a careful evaluation of the Alberta economy and the important role played by the transportation element in achieving desired development goals.

The remaining chapters are organized as follows:

Chapter 4 - Cargo and Freight Rates
Chapter 5 - Air Passenger Fares
Chapter 6 - Facilities and Services
Chapter 7 - Regulation in the Motor Carrier Industry
Chapter 8 - Transportation Research

CHAPTER 4

CARGO AND FREIGHT RATES

I Railway Freight Rate Problems

A. Long Haul Versus Short Haul Rail Freight Rates

A transportation problem that has existed for decades, and still persists today, is typically known as the long haul/short haul rate problem. The essence of this issue is that, in the West including Alberta, the railroads often assess a greater charge for a given shipment moving over a shorter distance than for the same identical shipment moving over a longer distance (via the same carrier and routing). The classic example is the circumstance where it may cost a shipper considerably more to move his commodity from a given point in Eastern Canada to an on-line point in Alberta than it does to move this same shipment through to Vancouver.

However, as evidenced by the example below, this transportation problem extends beyond the trans-continental route.

Caustic Soda	Miles	Rate in $ Per Ton	Cost Per Ton-Mile
Ft. Saskatchewan to Hinton	198	8.81	4.4
Ft. Saskatchewan to Prince George, B.C.	476	7.05	1.5
Chloride			
Ft. Saskatchewan to Hinton	198	10.09	5.1
Ft. Saskatchewan to Prince George, B.C.	476	9.54	2.0

To illustrate the major dimensions of this problem it is useful to select a specific industry and determine how this rate disparity might ultimately affect its development within Alberta. The steel pipe industry would appear to be particularly well suited to an Alberta location because of the presence of the oil and gas industry and the ongoing development of collection, distribution and transmission systems. Depending on its diameter either steel plate or skelp is used in the manufacture of pipe and the source of much of this material is in Eastern Canada at such centres as Hamilton and Sault Ste. Marie. Reference to Table III indicates that the prevailing rates on these inputs to Calgary and Edmonton are 59 to 77 percent higher than the rates to Vancouver.

TABLE III

EXAMPLES OF RAIL RATE DISPARITIES ON IRON AND STEEL PRODUCTS ARISING FROM THE TRANSCONTINENTAL RAIL RATE STRUCTURE

Commodity	From	Rate to Vancouver (In Cents Per CWT.)	Calgary & Edmonton (In Cents Per CWT.)	Percentage Differential
Steel plate	Hamilton, Ont.	112 ¢	198 ¢	77 %
Skelp	Hamilton, Ont.	118	197	67
	Sault Ste. Marie, Ont.	118	188	59
Angles	Contrecoeur, Quebec	150	235	57
Bars	Montreal, Quebec	161	246	53
	Toronto, Ontario	148	233	57
Plate or Sheet	Sault Ste. Marie, Ont.	161	233	45
	Simple Average	138 ¢	219 ¢	59 %

The table above also shows other eastern steel products on which the same rate disparity exists.

Historically, the reasons given for this type of rate structuring were that it enabled the railways to offset competitive Maritime services operating from east to west via the Panama Canal. Such arguments are not persuasive. In short, goods moving in international commerce may justifiably be rated below domestic traffic when the purpose is to enable a Canadian carrier to compete with foreign

flagships for the transportation services. However, for traffic terminating in the west (say Vancouver or Calgary) for local consumption, or originating in the west for sale in the east, the present system is patently discriminatory.

Based upon the principal that rates should be reasonably related to the costs of providing the service, and that they should be compensatory, there is no justification for the structural inequity inherent in the present system of setting rates for Vancouver, on the one hand, and points such as Calgary and Edmonton on the other. There are no general economic principles of rate-making which can justify a level of rates over a given routing which produces higher rates to intermediate points than to the terminal point on the route.

This inequitable situation not only disadvantages existing Alberta manufacturers and prospective manufacturers, but is also a problem with respect to its inconsistency with the whole principle of regulation. In our free enterprise system, we as a nation have determined that it is not in the public interest to rely upon free competition to produce an adequate supply of services at the lowest

possible cost, in those areas where the public convenience and necessity require uninterrupted supply, and where we have judged that, largely due to the capital intensive nature of the producing unit, open competition would lead to destructive competition which in turn would work to the detriment of all people. Instead, we have sought to limit competition and protect the supplier by raising the barriers to entry. In return, the supplier has agreed to the regulation of his activities, his service levies, and his pricing. This, of course, is to protect the consumer from the monopolistic supplier. In other words, we have determined that in the area of vital services requiring massive amounts of capital, that the government will regulate competition on the one hand, and the provision of rates and services on the other, in the best interests of all people. Examples of regulated industries are, of course, public utilities, communication companies and most major sectors of transportation. The trunkline railroads certainly fall into the latter category.

In the area of rail regulations, the regulatory body must be sensitive to the needs of the user and prospective user of the services. One implication

of this then is that one class of shipper should not be discriminated against when his traffic is identical in commodity description, when it moves over the same system and even on the same train, and when the conditions of carriage (including weight) are identical. In short, under these conditions of shipment, the rate between Toronto and Calgary, for example, should not exceed the rate from Toronto to Vancouver. This is true as a matter of sound economic principle and should also be true as a matter of law.

The impact of long and short haul rate disparities upon the Province of Alberta, while not quantified in this analysis, are indeed considered to be profound. On its face, assuming that the longer haul rates are compensatory, the problem implies the following:

(1) Established industry is penalized by forcing it to pay transportation costs which are in excess of the cost of service (including capital costs) provided by the carrier. In other words, there is, at a minimum, a cross subsidization effect taking place and Alberta industry is the subsidizer.

(2) Industrial expansion in Alberta is restricted because:

(a) the geographical envelope of buying and selling markets is restricted, and

(b) the excessively high transportation costs on both raw materials and supplies required in the manufacturing process causes one or both of the following to occur:

(i) the manufacturer must accept lower profit margins if he is to compete on a price basis in distant markets, or

(ii) the manufacturer is forced to restrict his potential sales volume by concentrating on markets close to home if he is to maintain profit margins.

In either case of (i) or (ii) above, the effect is to restrict the expansion of investment, employment, and consequently the whole tax base of the economy.

(3) As a converse to (b) above, it is always possible that an existing manufacturer may react to the transportation problem by raising prices in his local markets, if in fact he can lead his

competition in price changes, in order to compensate for reduced profit margins in external markets where his transportation costs are a major component. Such a situation would also be detrimental to Alberta and its further growth.

(4) Since the basic long and short haul problem also applies to Alberta's neighbouring prairie provinces, there is a similar disincentive for new industrial firms to locate within their borders. As a consequence, the whole of the West, Vancouver excepted, is sealed off from the East so that in effect Alberta has less opportunity of buying from and shipping to points closer than Ontario. That is to say, if the rate problem were cured, not only would there be a stimulative effect on the industrial base of Alberta but the same would also be true in Saskatchewan and Manitoba. This latter point would further assist Alberta since some eastern suppliers and buyers would locate in these two provinces, placing markets still closer (in a transportation cost as well as a distance sense) to Alberta. Relief from the rate inequities would thus provide a dynamic shift in the industrialization of Alberta.

The goals, or objectives, of Alberta should be to reinstitute and achieve an overall revision of the freight rate structure so that rates are reduced in accordance with economic rate making principles and are reasonably related to the costs of providing the service. LaBorde Simat Ltd. believes that there are four basic alternative courses of action available to the Government in the pursuit of this goal. However, these alternatives are not necessarily mutually exclusive.

First, the Government could take the lead with support from the private sector in negotiating rate reductions with the railroads. At this point, it is not clear what degree of leverage or influence this approach might command. Second, the Government might consider subsidization of transportation costs on imported inputs and on manufactured exports. We do not consider this to be either a palliative solution nor a corrective solution for the Government to pursue. Third, the Government might promote the development of competing long haul transportation services (such as a trucking operation) headquartered in Alberta. Fourth, the Alberta Government could adopt a course of action designed to require public hearing and investigation

at the Federal level into the proper principles of rate making as they apply to both transcontinental and regional freight rates. The logical extension to this investigation would be the application of its findings to the complete revision of all rate levels and structures at least so far as Alberta is affected. This is a much more comprehensive approach to the problem and one which may require a longer period of time to accomplish set goals.

LaBorde Simat Ltd. believes that the rate problem at hand is so ingrained in the system and it is so widespread in its impact, that primary emphasis should be placed upon the fourth alternative course of action. That is, we recommend that the Government prepare a detailed application, under appropriate statutes, for a Federal public investigation. The application should be supported by convincing and pursuasive economic evidence of (a) the widespread nature of the problem, (b) the massive inequities which exist in the system, (c) the economic impact of the discrimination, and (d) the recommended approach to be taken in the investigation. It is envisioned that the application for investigation should request a two-part case. The first part of the investigation should be to determine the

proper principles of rate-making to be applied in setting rates over the routes in question. The second phase should follow the first, and it should be an investigation to prescribe the level and structure of rates to be applied in the transportation markets in question.

As either a predicate for the above recommended application, or as a concurrent action, the Government should attempt to negotiate specific rate reductions with the railroads. This avenue does not necessarily attack the genesis of the structural problem, but it would provide relief from excessive rates in certain areas of commerce which would be of great short-term benefit at least. Moreover, it would provide positive evidence of rate inequities which could be used in preparing the Government's affirmative case in the public investigations to follow.

The subsidy approach is not considered to be a viable or for that matter a popular alternative. In the first place subsidies interfere with the normal market mechanism and give rise to the danger of misplaced or misspent funds which can ofttimes create further problems. Secondly, subsidies do

not solve the basic causes of the rate problem but tend only to offset its effects which can have a prolonging effect. Finally, government subsidies are not looked on with favour because they imply government interference in the private sector.

A program to encourage greater competition by alternative modes is also not without its drawbacks. For example, while trucking may be competitive in the movement of general merchandise, the railways still retain the advantage because of lower per unit costs on the movement of low-value and bulk commodities. Also, such an approach would again only prolong the basic issue, the problem that rail freight rates are not presently structured in accordance with rational rate-making principles.

B. Application of Rail Rate Increases

The manner in which rate increases have been applied by the railways has been a detriment to some shippers while it has had little effect on others. The classic example, of course, was where the same percentage increase was applied to both the long and short-haul shipper. Because of the higher rate prevailing on his goods, the long-haul shipper was forced to bear a greater dollar increase than the

short-haul shipper. This had an adverse effect on industries in areas such as Alberta that were attempting to move their goods to distant markets and/or buy their raw materials from far away suppliers. The result was that with each successive increase these industries found it more and more difficult to compete in the larger, but more distant markets.

In order to test the rationale of the horizontal percentage rate increase it is necessary first to examine the components of railway costs on which freight rates are structured. There are basically two components to railway costing, terminal costs and line-haul costs. Terminal costs cover such items as loading and unloading, warehousing, billing and accounting and so on, which are normally quite labour intensive in nature. Line-haul costs, on the other hand, reflect the cost of actually moving the shipment and include such items as fuel and crew expenses. It has been determined in the United States that because terminal operations are more labour intensive that terminal costs tend to rise much faster than line-haul costs.

Since terminal costs do not vary with distance they account for a smaller proportion of total

costs as the mileage and consequently the rate increases. Similarly any increase in terminal costs also bears less significance as the mileage increases. It can be concluded therefore that if rate increases truly reflect increasing costs then the rates over longer distances should bear less of an increase than the rates over shorter distances.

This point is aptly illustrated in the following example:

Mileage:	500 Miles	1,000 Miles
Prior to Increase:		
Terminal Cost	$ 5.00	$ 5.00
Line-haul Cost	5.00	10.00
	$ 10.00	$ 15.00
After Increase:		
Terminal Cost + 10%	$ 5.50	$ 5.50
Line-haul Cost + 5%	5.25	10.50
	$ 10.75	$ 16.00
Average Increase:	7.5%	6.7%

In a study entitled The Alberta Economy by R. W. Wright an input-output analysis was conducted which illustrates the relative value of transportation inputs in each of thirty-one defined Alberta industries. It was found that the industries bearing the higher proportion of transportation costs were in many cases primary or resource industries where rates could be assumed

to be relatively low. As an example, the rail transportation coefficient was only .0113 in the auto accessory industry while it was .0337 and .0399 in the agricultural and petroleum sectors, respectively. This indicates that rail costs as a proportion of total value of output are at least three times higher in the petroleum and agricultural sectors than they are in the auto accessory industry.

Since transport costs generally have a much greater impact on the primary industries, and because Alberta depends so heavily on petroleum and agriculture, it is obvious that any such higher rate increases can have an adverse effect on the provincial economy. Moreover, with the railways applying the greatest percentage increases to low rated commodities where rate elasticities are normally highest, the impact can be even more pronounced.

Thus, as a result of the new system of applying rail rate increases which presumably occurs when cost increases justify them, lower rated shipments will, generally speaking, receive the greatest percentage increase while the converse is true for

the highest rated shipments. This presents a problem for Alberta since it will penalize its existing primary industry, at a time when the economic base of the Province has not accomplished the shift from resources to manufacturing and other secondary industry.

Therefore, we believe that it should be the Government's objective to minimize the effect of any rate increase formula which will severely burden low-value commodity movements into and out of the Province.

Alternative courses of action on the part of the Government include:

(1) Seek specific commodity exemptions directly from the railways for low-valued commodities, particularly over short-haul routings. The price elasticity of affected commodities and "ability to pay" should be major considerations, developed in context of the traffic volume tendered, the railways' revenues, and the contribution to overhead and profit that are at stake. For this purpose Alberta might join forces with Saskatchewan and Manitoba for additional leverage.

(2) Apply to the Railway Transport Committee in

an effort to gain the desired specific commodity exemptions.

(3) Provide a subsidy to certain industries to help offset the impact of inordinate rate increases.

LaBorde Simat Ltd. recommends the first approach as a practical course. However, informed discussion should also be initiated with the Railway Transport Committee to (a) make this body aware of the problem, (b) demonstrate the impact of the problem (the significance of the change in methods of assessing rate increases), and (c) present the "ability to pay" argument in such a fashion that the Federal Government will understand the detrimental impact the system will have on Canadian exports of low valued commodities from the West, particularly agricultural products. The groundwork should simultaneously be laid for later application of federal subsidy to the affected industries, at least on the domestic portion of international movements.

C. International Rail Rates

The Northern and Central regions of the United States as well as the whole of the West Coast, offer a sizable potential market for Alberta produced goods.

However, the railway freight rates prevailing on the movement of Alberta goods into the United States are often much higher than domestic rates over comparable distances. This tends to perpetuate Canada's east-west trade alignment, and it restricts the market for provincially produced goods and prevents local producers from achieving the economies of scale that might otherwise be possible if the United States markets were, in fact, more readily accessible.

To illustrate the importance of this issue it is useful to compare the relative proximity to Alberta of the United States Mid-west market versus Canada's major eastern market. A publication entitled <u>The New Chicago</u> states that within a 500 mile radius of Chicago there resides a population of 64.4 million people which is about three times the entire population of Canada. Minneapolis, which lies well within this radius, is 1,146 rail miles from Calgary while Toronto, which lies at the centre of Canada's eastern market is 2,055 rail miles away. It is obvious that the United States market is larger and closer and should therefore offer considerable potential for Alberta produced goods.

However, the current rate structure prevailing into United States markets may seriously hamper such trade. As an example, it is instructive to compare the rate on farm machinery moving between Calgary and Thunder Bay and Calgary and Minneapolis which represent approximately the same distances. Reference to Table IV indicates that on the basis of 20,000 pounds minimum per car, the rate to Thunder Bay is $3.46/cwt, or 5.57¢ per ton-mile, while the combination rate to Minneapolis is $3.77/cwt, or 6.58¢ per ton-mile. The difference in rates is 18% on a ton-mile basis.

TABLE IV

COMPARATIVE RAIL FREIGHT RATES ON FARM MACHINERY

CALGARY TO THUNDER BAY AND MINNEAPOLIS

	Mileage (miles)	Min. Wt. (lbs.)	Rate in Cents Per CWT	Rate per Ton-Mile
Calgary to Thunder Bay	1,243	20,000	346	5.57 ¢
Calgary to Minneapolis	1,146	20,000	377	6.58 ¢

Source: Canadian Pacific Railway

One of the basic reasons for international rates generally being higher than domestic rates is that in some instances the international rate is based on a

combination of tariffs quoted separately by United States and our domestic carriers. This usually reflects the fact that the movement of the particular commodity is not in sufficient volume to qualify for a through rate which would likely be considerably lower.

With respect to the international movement of farm machinery, an analysis was conducted to determine whether or not the rate on the domestic portion of the journey to Portal, Saskatchewan differed from the rate applying over comparable domestic mileages using the same commodity and the same weight minimum. The results of the analysis indicated that there was no real difference. The rate applying on the American segment was then plotted against comparable domestic mileages and again there was found to be no major difference.

The problem would appear to lie in the ability of Alberta-based processors and manufacturers to develop sufficient volume on shipments into the United States to negotiate and justify the application of through rates and thus avoid the effect of paying double terminal charges.

The primary impact of this rate problem is again the restriction in marketing opportunities for Alberta firms. Other things being equal, there is further disincentive for the private sector to expand local investment and employment opportunities and a restriction on the potential tax base of the Province.

The Provincial goal should be to achieve rates on international movements of traffic that will enable local producers to market their goods at least as freely in United States markets as in Canadian markets, notwithstanding penalties imposed in the form of United States import duties. In pursuit of this goal it is recommended that the Government of Alberta provide the negotiating mechanism and the lead in bargaining for through rates with the U.S. and Canadian railroads. Similarly, as alluded to in previous sections, the negotiating and regulatory support of the Federal Government should be sought with a demonstration of the benefits which will accrue to all of Canada through a facilitation of export opportunity.

Furthermore, the Province should consider the establishment of an export assistance program which would be charged, not with the responsibility for

financial subsidy, but with the duty of consulting and information assistance to prospective marketers in the international arena. Such counseling services would extend beyond transportation rates and services to areas such as duties, customs and market prospects in foreign lands. It is conceivable that this program could have its beginnings in the various universities located in the Province at nominal cost to the Government, yet provide on the other hand practical work for students and faculty.

D. Rates on Manufactured Goods Compared to Rates on Raw Materials

(1) The Question of Class Rates

Much of the rail traffic moving out of Alberta and for that matter Western Canada is in the form of either grain or other natural resources which generally carry a low per unit value and thus move under relatively low rates. Since low-valued commodities are generally more sensitive to marginal changes in rates than are higher valued goods, it is doubtful whether they could stand rates much higher than the prevailing charges and still move in the present quantities. Thus, it is essential that low rates on low-valued commodities be preserved.

According to the 1970 Waybill Analysis, for carload traffic only, the statutory grain movements accounted for 42 percent of the total ton-miles of traffic originating in the West. (See Table V below).

TABLE V

DISTRIBUTION OF RAIL CARLOAD TRAFFIC ORIGINATING

IN THE WESTERN REGION BY TYPE OF RATE - 1970

pe of Rate (1)	Ton-Miles (000) (2)	Percent Distri- bution of Ton-Miles (3)	Trans- portation Revenue/ Ton-Mile (4)	Trans- portation Revenues (000) (5)	Percent Distri- bution of Revenues (6)
ass rates	791.3	0.2 %	5.71 ¢	$ 45.2	1.0 %
mmodity rates	237,811.6	51.0	1.28	3,049.5	66.4
reed charges	29,906.3	6.4	1.69	505.3	11.0
atutory grain rate	197,881.8	42.4	0.50	994.4	21.6
tal	466,391.0	100.0 %	0.99 ¢	$ 4,594.4	100.0 %

urce: Waybill Analysis, Carload All-Rail Traffic - 1970, Railway Transport Committee

The above table gives some indication of the spread of rail rates across various types. It also shows that on carload traffic alone the class rate portion is of little significance since it accounts for less than one-half of one percent of all the carload traffic. If these data truly reflected all traffic movments including less-than-carload, it would be perilous to argue for lower rates at the top while possibly inviting corresponding adjustments at the

low end of the rate scale. These data, unfortunately, mask the true story. By not including data on less-than-carload shipments one cannot discern the true overall distribution of traffic but one would certainly expect that class rated traffic would in fact be proportionately more significant than what is indicated above.

We believe that the Government should take action to reduce the level of class rates charged by the railroads. In fact, the yield of 5.71¢ per ton-mile on carload quantities is approximately the same as truck yields where door-to-door services are usually faster than rail. However, to negotiate reductions in the class rate might be very harmful if the railroads could in turn exact higher commodity rates to the detriment of lower-valued commodity shipments.

LaBorde Simat Ltd. recommends that instead the Provincial Government should attack the application of class rates which are obviously restricting the flow of higher-valued general commodity traffic. It is suggested that the Government present a case for negotiation with the railroads which will cause commodity rates or FAK rates to be implemented in lieu of class rates upon the showing by a shipper or group of shippers that they are prepared to offer a minimum volume of traffic to the carriers

over a specified period of time.

(2) Disincentives to Local Processing

It has been argued by the Governments of Alberta and Saskatchewan that the railways charge much higher rates on processed or manufactured commodities in order to recover their costs on the movement of statutory grain and other natural resources. This, it is said, impedes the development of manufacturing within the Province because it encourages the processing of Alberta resources nearer to the major buyer markets. A significant example of such rate problems, and one that has been thoroughly documented is the rapeseed case which is currently in litigation.

Table VI illustrates how the present rate structure favours the export of rapeseed in the raw, rather than the processed state, and thus virtually deprives Alberta of the extra value-added that would result from the processing. These figures show that it costs 70.5¢ to ship the seed as opposed to a total of 108.7¢ for shipping the meal and the oil, a differential of 38.2¢, or 54 percent. This strongly favours the eastern location and discourages the development of processing facilities within the Province.

TABLE VI

COMPARISON OF RAIL FREIGHT COSTS FOR SHIPPING RAPESEED VERSUS RAPESEED PRODUCTS: LETHBRIDGE TO MONTREAL

	Cents Per 100 lbs.
Crushed at Lethbridge:	
Oil portion of seed Lethbridge to Montreal 38/100 x 1.22	46.4
Meal portion of seed, Lethbridge to Thunder Bay 62/100 x 26.5	16.4
Meal portion of seed, Thunder Bay to Montreal 62/100 x 74	45.9
	108.7 ¢
Crushed at Montreal:	
Seed, Lethbridge to Thunder Bay	26.5
Seed, Thunder Bay to Montreal	44.0
	70.5 ¢
Rate Disparity:	38.2 ¢

Source: Transportation Research & Development Division, Government of Alberta

In such cases, the Provincial Government could attempt to achieve rate adjustments which will lower the rates on finished products leaving the Province, in relation to the rates already prevailing on the constituent raw materials.

Of the various standard alternative courses of

action available to the government such as (a) application for relief before the Railway Transport Committee, (b) Provincial transport subsidy to encourage local processing, and (c) direct negotiation with the railroads for rate reduction on finished goods, LaBorde Simat Ltd. suggests the third alternative as the initial approach. For a small number of selected cases this approach could provide earlier relief than if Federal application were made.

At the same time, the Province could apply to the Railway Transport Committee for a complete investigation into the Crows Nest Pass rate structure. As already stated earlier, it has on occasion been suggested, though not substantiated by fact, that in the West the railways attempt to offset diminished revenues on the carriage of grain by charging higher rates on high-value manufactured commodities. In other words, since grain moving from the West carries such a low rate, which is bound by Government statute, the railways presumably make up the difference on higher-value commodities.

While at this stage this cannot be proven or disproven, it is important to recognize Alberta's desire to shift into secondary industry. This

would suggest the need for a shift as well in rate-making procedures so as to transfer the incentive more and more to the movement of manufactured or processed goods. The present Crows Nest Pass rates were originally established around the turn of the century to encourage the movement of Western grain which raises the question as to whether or not these rates truly reflect the cost increases that have occurred over this span of years and are therefore sufficiently compensatory. Since such a large proportion of traffic moves under this type of rate and since there may be some question as to whether or not these rates are truly compensatory, then it is also recommended that an inquiry be launched by the Railway Transport Committee to examine the Crows Nest Pass rate structure in relation to rates prevailing on higher-value commodities and in terms of rational rate-making principles.

E. Rail Rate Groupings

According to the 1951 Royal Commission on Transportation, "When rates to or from all points within an area from or to a point outside that area are identical that area is said to constitute a rate group."

While rate groupings are commonplace in Eastern and Central Canada, there has been a marked lack of such groupings in the West. As a result, eastern centres which are situated as far apart as Montreal and Hamilton are, in the case of many commodities, subject to the same rate while Alberta communities that are located only a few miles from one another may bear considerably different rates. To illustrate this point Table VII shows the rates prevailing on iron and steel products from a number of centres in the East to a number of communities throughout Alberta.

TABLE VII

SELECTED RATE GROUPINGS

FROM EASTERN ORIGINS TO ALBERTA DESTINATIONS

ANGLES, BEAMS, CHANNELS, BARS, PLATE AND SHEET

From	To	Min. Wt. in Lbs.	Rate in Cents/100
	Calgary		
	Clover Bar	80,000	256
	Edmonton	100,000	242
	Hubalta	120,000	239
	Lethbridge	140,000	237
	Lloydminster		
	Medicine Hat	80,000	261
Hamilton, Ont.	Claresholm	100,000	247
Montreal, Quebec	Fort Saskatchewan	120,000	244
Oakville, Ont.	Red Water	140,000	242
Oshawa, Ont.	Grande Prairie	100,000	322
Toronto, Ont.		120,000	319
		140,000	317
		80,000	267
	Hardisty	100,000	253
	Red Deer	120,000	250
		140,000	248

Source: Transportation Research & Development Division, Government of Alberta

It is apparent that the lack of such groupings in Alberta will tend to impede any effort on the part of the Government to encourage the dispersion of industrial development throughout the Province. Referring back to Table VII it is reasonably obvious that an industry that uses iron or steel as a basic input would have a greater tendency to situate a plant in Calgary, Edmonton, or Lethbridge rather than locating in Claresholm or Fort Saskatchewan where the rates on incoming iron or steel are higher. Since manufacturers are generally interested in minimizing their transportation costs it is obvious that such rate disparities will perpetuate the industrial development of larger Alberta centres while detracting from the development potential of others.

The impact of the lack of sufficient rate groupings may be stated as follows:

(1) It restricts any effort on the part of the Provincial Government to disperse industry throughout the Province, particularly in bringing economic opportunity to such communities.

(2) It perpetuates industrial growth in certain centres which may be looked on with some

disfavour because of negative side effects, such as pollution, industrial crowding, etc.

(3) It limits industrial growth, the development of employment opportunities, and further investment and tax revenues in all but a select number of centres.

It is recommended that the Provincial Government examine the need for further rate groupings in terms of its policy respecting the dispersion of industry. This may be best left as a later goal and concentrate initial attention upon the attraction of industry per se. At a point where further rate groupings are desired, the standard options discussed previously herein would appear to be open to the Provincial Government, and again it is suggested that direct negotiation with the railroads (with support from industry and community leaders) is the preferred initial approach. However, there may very well evolve within Government much more effective means of achieving dispersion of industry throughout the Province, and this fact is, of course, recognized in this particular study.

F. Interswitching Charges

A factor which may hamper Alberta-based shippers is

the charge levied for transferring freight cars between the lines of two different railways.

The Alberta Bureau of Statistics defines this problem very well in a publication entitled Alberta Industry and Resources. "In cities served by two or more railways, users may be required to pay interswitching charges, the costs of transfer of freight cars from a line of one railroad to that of another. No charges are levied for transfer to points within four track miles of the interchange point. Beyond this distance interswitching class rates, special switching rates or local rates apply. These charges are subject to negotiation and should be agreed on with the carrier before a final decision is made on plant location". Interswitching charges are commonplace throughout Canada wherever freight cars must be transferred from one line to another.

This is likely to cause some problem for an Alberta producer or manufacturer who lies outside the four mile limit. The interswitching charge will add to the cost of marketing the product or increase the cost of needed inputs.

Interswitching charges, which can range anywhere from an additional four to eight cents per hundredweight,

up to 45 or 50 cents per hundredweight,[1] depending upon whether the charge is agreed or it is a class rate, penalize firms that lie more than four miles beyond the interchange point and where major markets and suppliers are positioned on the line of another railway. Consequently, there may be a tendency to restrict the area over which industry is located within a community (firms who are dependent upon rail services will have a tendency to locate within the four mile limit).

LaBorde Simat Ltd. does not consider the present system of agreed charges to be unreasonable, however, the assessment of class rates at 5 to 10 times higher than the agreed rates for identical services and identical costs incurred by the railways, is unreasonable. In this regard we recommend that the Provincial Government pursue the issue of class rate charges with the railways (as discussed in Section D1 above) in an effort to assure minimum application of interswitching class rates. Moreover, the Government should include in its regular industrial information services, a statement to prospective firms indicating the existence of interswitching charges, the range of such charges, and a specification of the four-mile limit regulation.

1 Canadian Pacific Railway.

II Air Cargo Rate Problems

As is the case with other common carriers, rates on air cargo depend very much on the volume and density of the traffic being moved. If a particular commodity does not move on a regular basis or in insufficient volume then general commodity rates will normally apply. However, if a shipper can guarantee regular shipment on a reasonably large scale, then he will likely qualify for a specific commodity rate which is considerably lower. In addition, the airlines will sometimes publish specific commodity rates not so much in response to a shipper's needs but as a means for encouraging certain types of traffic, offsetting competition from surface modes or alleviating an empty backhaul problem.

An examination of specific commodity tariffs reveals that in the case of traffic originating at either Calgary or Edmonton only a few items move under this rate category. Initially, this would indicate that very few commodities move as air cargo out of these two centres or that in most instances the volume is not sufficient to qualify for the lower rates. It would further suggest a possible lack of awareness on the part of the Alberta-based shipper as to the advantages which air cargo has to offer.

Table VIII provides selected comparisons on the rates applying on the domestic and international carriage of air cargo.

TABLE VIII

SELECTED DOMESTIC & INTERNATIONAL CARGO RATES

	Min. Wt. in Lbs.	Rates in Cents Per Lb.
Meat & Meat Products/Machinery & Tools/Wearing Apparel		
Calgary to Montreal	2,000	7
Montreal to Calgary	2,000	18
Calgary to Toronto	2,000	6
Toronto to Calgary	2,000	16
Cosmetics/Drugs/Medical Supplies		
Edmonton to Toronto	200	20
Toronto to Edmonton	200	16
Machines		
Edmonton to London, U.K.		
Edmonton to Montreal	2,000	7
Montreal to London	2,200	26
		33
London, U.K. to Edmonton		
London to Montreal	2,200	26
Montreal to Edmonton	2,000	18
		44

Referring to Table VIII in the case of meat, machinery and wearing apparel the 6¢ rate per pound prevailing from Calgary to Toronto is less than half that applying

over the same route in the westward direction. In Canada the predominant flow of air cargo traffic is from east to west[1] reflecting the fact that the major proportion of processing and manufacturing is done in the East. It is because of this fact that the airlines are confronted with a major backhaul problem in the eastward direction. In fact, discussions with airline representatives revealed that the 6¢ rate per pound was implemented in order to attract traffic, much of which is presently moving by truck or rail, and thus alleviate the backhaul problem.

In contrast, the rate on cosmetics, drugs and medical supplies moving between Edmonton and Toronto is four cents per pound higher eastward than in the reverse direction. It is obvious that this rate is designed to accommodate a greater flow of this type of traffic in the westward direction. Again, the empty backhaul problem is a logical outcome of this type of rate structuring.

Referring again to the machine example, the rate from Edmonton to London, U.K. is eleven cents less than the rate applying in the reverse direction. It is noteworthy that the rate applying on the international portion of the journey is identical

1 Air cargo volumes are moving at about two to one in favour of westbound traffic.

both ways and that the differential is caused entirely by the low incentive rate applying eastward on the domestic portion of the journey.

It is important to recognize that air cargo shipments, unlike air passenger traffic, tend to move only in one direction and not on a round-trip basis and this is what gives rise to the empty backhaul problem. It would therefore be in the airlines' own best interests to implement low backhaul rates on the eastward movement of air cargo in order to encourage traffic. Furthermore, not only would the airlines benefit but so would the Alberta manufacturing sector which would be encouraged to develop because of the greater accessibility to distant markets made possible by the lower rates and the speed and convenience of the air cargo mode.

While the 6¢ rate per pound previously referred to is a significant step forward in encouraging the eastward movement of air cargo traffic, it unfortunately only applies to shipments of 2,000 pounds and more which are normally only within the range of major shippers and freight forwarders. It is recognized that the airlines must ensure that they do not dilute their yield position by making such low

rates too readily available and this has likely given rise to the 2,000 pound minimum. However, it is felt that these low rates could be broadened further to encompass more commodities and thus encourage the eastward movement of a wider range of Alberta-produced goods.

The Provincial Government's role with respect to air cargo rates should be to encourage lower rates on goods which are manufactured within Alberta and for which there is considerable potential in distant markets such as Eastern Canada, the United States, and the Pacific Rim.

It is recommended first that the Provincial Government negotiate with the airlines in order to bring a broader range of Alberta manufactured commodities under the 6¢ rate per pound. Secondly, the Provincial Government should question the airlines concerning the present 2,000 pound minimum to determine whether it can be lowered and thus bring the 6¢ rate per pound within reach of a greater number of Alberta-based shippers. Thirdly, the Province should seek to protect the 6¢ rate per pound in order to ensure that the airlines do not take action to increase it once eastward traffic volumes have risen to a sufficient level. Finally, the Provincial Government should strive to obtain lower through rates to major international markets.

CHAPTER 5

AIR PASSENGER FARES

In a 1969 study prepared for the Manitoba Government it was stated that "an adjustment of fares to reflect the reality of Canada's geography relative to jet-age airline operation is important to aviation development".[1] Indeed, Alberta residents are confronted with a passenger fare structure for which in some instances there appears to be no economic rationale.

Without embarking on a detailed analysis, it is instructive to study certain selected passenger fares in order to view at least some of the disparities that presently exist in the tariffs. Table IX illustrates the problem by making certain comparisons of air passenger fares prevailing on selected domestic and international routes.

The first point which Table IX illustrates is the fact that the fare per mile on transborder services is generally higher than the fare per mile prevailing over domestic routes of comparable mileage. For example, the fare per mile between Calgary and

1 Manitoba to 1980, Report of the Commission on Targets for Economic Development, P. 369

Spokane is 12.4 cents as opposed to 9.6 cents between Calgary and Saskatoon even though the mileages are very similar. In this case the transborder fare per mile is 29 percent higher than the domestic fare. To further illustrate the problem, the fare per mile between Calgary and Houston is 7.7 cents compared to 6.5 cents between Calgary and Toronto. Again, the mileages are very similar but the transborder fare is 18 percent higher than the domestic fare on a per mile basis. The same type of disparity appears in the case of the Calgary-Denver service when the fare prevailing on this route is compared with the fare applying over a similar domestic mileage.

TABLE IX

COMPARISON OF AIR PASSENGER FARES

SELECTED DOMESTIC AND INTERNATIONAL ROUTES

	Miles	One-Way Economy Fare (Dollars)	Economy One-Way Fare/Mile (Cents)
Calgary-Denver, Col.	899	74.52	8.3
Calgary-Winnipeg, Man.	741	55.00	7.4
Calgary-Spokane, Wash.	287	35.64	12.4
Calgary-Saskatoon, Sask.	323	31.00	9.6
Calgary-Houston, Texas	1,746	134.00	7.7
Calgary-Toronto, Ontario	1,669	109.00	6.5
Edmonton-London, U.K.	4,228	325.00	7.7
Montreal-London, U.K.	3,239	213.00	6.6
Calgary-Rome	5,248	401.00	7.6
Montreal-Rome	4,089	289.00	7.1
Edmonton-Amsterdam	4,318	347.00	8.0
Montreal-Amsterdam	3,419	235.00	6.9
St. Louis-London, U.K.	4,187	286.00	6.8
Edmonton-London, U.K.	4,228	325.00	7.7

It must first be recognized that the cost of processing an international passenger is higher than the cost domestically. This arises primarily from the fact that the international passenger must be processed through Customs and Immigration which entails an addition to the terminal charge which in turn is passed on to the passenger as an addition to his fare. However, the fact that the fare between Calgary and Spokane is 29 percent higher than the comparable domestic fare would appear to be excessive even considering the extra processing costs involved in Customs and Immigration.

Table IX next shows that the international fare per mile between Calgary and Edmonton and selected European destinations is substantially higher than the fare per mile between Montreal and the same destinations, even though the mileage from Montreal is considerably less. As an example, the Edmonton to London great circle distance is 4,228 miles and the fare per mile is 7.~~8~~7 cents while on the other hand the Montreal to London distance is 3,239 miles and the fare is 6.6 cents per mile. A similar disparity appears when the Calgary to Rome fare is compared to the fare between Montreal and Rome. The distance from Calgary to Rome is 5,248 miles

and the fare per mile is 7.6 cents, however, the Montreal to Rome distance is only 4,089 and the fare per mile is 7.1 cents. The same type of fare disparity exists when comparing Edmonton-Amsterdam with Montreal-Amsterdam..

It is normally assumed that the cost per mile of operating an airline service decreases as the stage length increases because the fixed costs of the airline are allocated over a greater number of miles. If this is the case, then the cost per mile of operating the Edmonton-London service should be less than the cost for the Montreal-London service. This in turn should be reflected in a lower fare per mile on the Edmonton-London service. An examination of the data in Table IX indicates that the fare per mile from Edmonton to London, for example, is 18 percent higher than from Montreal to London when as a matter of economic principle the taper in airline costs should dictate a fare per mile that is lower from Edmonton than from Montreal.

Finally, Table IX provides a comparison of international fares prevailing at non-gateway points both in Canada and the United States. The example shown indicates that the fare per mile between

St. Louis and London is 6.8 cents as opposed to 7.7 cents between Edmonton and London, both of which represent approximately the same mileages. This would suggest that the international fare at Edmonton is excessively high. Under these circumstances the fare per mile from Edmonton should be at least equal to the fare from St. Louis.

The effect of excessively high passenger fares is really two-fold. First, it penalizes the business-man who travels by air with a high degree of frequency and whose travel expenditures account for a major cost of doing business. This may have a particularly severe impact on Albertans who ofttimes must travel over long distances to points in Eastern Canada, the United States and elsewhere in order to conduct their business. Secondly, excessively high air fares will place air travel out of reach of many travellers who might otherwise fly if fares were set at a lower and more reasonable level. High air fares can thus have a social as well as an economic impact on the Province by denying many people the ability to travel by air.

The Province's role with respect to air fare problems should be to ensure that air passenger fares accurately reflect the cost of operating the service and are consistent with the fares charged over comparable mileages and routings elsewhere.

Wherever air passenger fares are proven to be inordinately high with respect to those charged under similar circumstances elsewhere then the Provincial Government should bring the matter to the attention of the Air Transport Committee for their review and consideration. Alternatively, where the airlines are reluctant to make needed fare adjustments the Province should then consider encouraging greater competition from the non-scheduled or charter carriers operating in the same markets.

CHAPTER 6

FACILITIES AND SERVICES

I Air Passenger Services

Reference to Table X indicates the substantial growth in commercial air passenger traffic that occurred at Calgary and Edmonton between 1965 and 1970.

TABLE X

INTERNATIONAL AND DOMESTIC ENPLANED AND DEPLANED PASSENGERS AT CALGARY AND EDMONTON - 1965 AND 1970

Airport	1965	1970	% Increase	Annual Rate of Growth
Calgary International	555,000	1,203,396	117%	17%
Edmonton International	356,500	585,040	64	10
Edmonton Industrial	138,200	366,531	166	22
Edmonton Total	494,700	951,571	92	14
Grand Total	1,049,700	2,154,967	105%	15%

Source: Airport Activity Statistics, Aviation Statistics Centre

The data in Table X indicates that total scheduled passenger traffic at Alberta's three major airports increased by an average of over 15 percent annually and it is likely that this scale of growth will continue for at least some years to come. In fact,

we believe that with new direct services in the future coupled with fare revisions where inequitable fares are presently being charged, this 15 percent growth rate will be exceeded. This sort of growth will have important implications for Alberta because it will necessitate major improvements in virtually all levels of service as well as terminal facilities. Moreover, it will be a source of new investment, employment and trade for the Province.

It is essential that we recognize how the level of air services can materially affect economic development. Firstly, Alberta is isolated with respect to Canada's major eastern markets by distances of 1,500 miles and more and the rail and highway mileage from Calgary or Edmonton to Vancouver approaches or exceed 650 miles. To facilitate the free east-west movement of people and cargo it is essential that adequate transcontinental air service be provided, particularly with the recent decline in transcontinental rail passenger service. Secondly, if Alberta is to nurture trade opportunities and tourism with major markets in the United States, Europe, and the Pacific Rim countries, it must be serviced by an adequate number of direct international flights. Finally, the growth and development of Northern Alberta and the smaller communities and tourist areas throughout the Province will depend to a large degree on the

availability of adequate regional and intraprovincial air services.

The need for improved air service at all three levels must be measured in terms of a number of established criteria. First, the need for air service improvements must be examined in terms of the social and economic stimulus it will provide to the community or communities involved. Second, the potential traffic in local as well as connecting markets must be examined to determine whether it is sufficient to justify the service improvement. Third, proposed improvements must be examined to determine their impact with respect to competitive air services as well as alternate passenger and cargo modes.

It may be determined after an examination of the local market that while there is insufficient traffic to justify air service improvement, there is a strong social and economic need for such improvement. This may be the case in isolated and developing communities where the present market is very small but where access is a major problem or where improved air service would facilitate greater growth and development. In these instances some form of subsidy may be required in order to make the service economically viable.

A. Transcontinental Air Service

Air Canada and CP Air are presently the only air carriers serving Alberta on a transcontinental basis and certain deficiencies in service either already exist or are likely to arise in the future as passenger volumes increase. An examination of origin-destination traffic and passenger load factors in the various markets will indicate where air service improvements are required in terms of increased scheduling, improved airline connections, the introduction of competitive service or the implementation of non-stop service where no such service previously existed.

A detailed analysis of Alberta's air service requirements is unfortunately beyond the scope of this study. However, in order to illustrate the problem it is perhaps instructive to investigate one or two areas where air service improvements might be made. In a 1969 study prepared by Simat, Helliesen & Eichner, Inc. entitled Air Service Requirements of Calgary, 1969-1973, it was recommended that service be improved in the Calgary-Victoria and Calgary-Ottawa markets. Applying established criteria it was estimated at that time that there would shortly be sufficient traffic in these markets to justify implementation of two round-trips daily on a single plane basis.

Table XI shows the growth in traffic between 1968 and 1970 in the Calgary and Edmonton markets for both Ottawa and Victoria.

TABLE XI

ORIGIN-DESTINATION PASSENGER TRAFFIC, 1970

Market	1968	1970	Percentage Change
Calgary-Ottawa	12,410	18,385	48
Calgary-Victoria	14,930	20,790	39
Edmonton-Ottawa	11,610	17,640	52
Edmonton-Victoria	11,720	15,420	32
Total	50,670	72,235	43%

Source: Air Passenger Origin and Destination Statistics Domestic Report, 1968 and 1970, Aviation Statistics Centre

Traffic in all these markets combined, increased by 43 percent over the two-year period. In the case of the Victoria market, however, Calgary presently has one round-trip daily while Edmonton must rely exclusively on connecting flights. Calgary is presently served by two flights travelling to Ottawa and two in the reverse direction, all requiring intermediate stops. However, Edmonton must again rely strictly on connecting flights.

While passenger traffic in both the Calgary and Edmonton markets has undergone similar growth there is a marked disparity in the level of service at the

two centres. A preliminary analysis would suggest that in the case of the Victoria and Ottawa markets service at Edmonton should be improved to a level at least comparable with that of Calgary.

To extend the analysis further, it is interesting to note the present level of competitive service on transcontinental flights. The amount of competition allowed on a particular route has an important bearing on the quality of service offered. As already stated Air Canada and CP Air are the only carriers presently offering transcontinental service. However, under present policy CP Air is restricted by the fact that it is only allowed to offer 25 percent of the total number of available seats on transcontinental flights. In essence, therefore, the total level of service on transcontinental routes is singularly dependent upon the scheduling desires of one airline, namely Air Canada. A greater degree of competition would provide a better standard of service on east-west flights.

B. <u>Regional and Intraprovincial Air Services</u>

The regional and intraprovincial air carriers play an effective role in Alberta's development by

providing scheduled air service at a number of smaller communities throughout the Province. They thus act as an effective substitute for declining rail passenger service and provide a stimulus to social and economic development in smaller Alberta centres. In addition, the regional carrier provides an important link between Alberta and a number of communities located throughout British Columbia, the Northwest Territories, and the Canadian Arctic. In essence, these vital services offer transportation to both the local and the connecting passenger, as well as to the cargo shipper.

While the Federal Government has primary legal jurisdiction over aviation matters, there is an obvious role for the Provincial Government to play. The Provincial Government is much more sensitive to the air service needs of smaller communities than is the Federal Government. Moreover, the Provincial Government will undoubtedly establish certain development goals for smaller Alberta centres, and it is essential that the level of air services be consistent with these goals.

There are three important areas where the regional and intraprovincial air carrier can play a vital role in Alberta's social and economic development.

These are as follows:

(1) The provision of air service at established communities throughout the Province so as to provide a stimulus to local industry and commerce, and new residential development.

(2) The provision of air service at newly developing resource communities, particularly in northern Alberta, where access is often a problem.

(3) The provision of air service at recreation areas such as Banff, Jasper, and Waterton to stimulate the growth of tourism in the Province.

Two immediate concerns are the need for competitive service on selected intraprovincial routes, and the need to provide and maintain air service in certain communities where the traffic is not presently sufficient to sustain service at reasonable fares and rates.

With regard to the first issue it is interesting to note the growth in air passenger traffic that has occurred between Calgary and Edmonton. In 1971 a total of 254,800 passengers travelled between Calgary and Edmonton compared with 173,220 in 1968, reflecting an increase in traffic of 47 percent

over the three-year period. In contrast, the number of weekly one-way flights between the two cities increased from 129 in September of 1968 to 159 during the same month in 1971, indicating an increase in frequency of 23 percent.

The principal carrier operating between Calgary and Edmonton is, of course, Pacific Western Airlines which provides service at both of Edmonton airports, the Industrial and the International. While Time Airways also provides service at the Industrial Airport, it cannot be termed strictly competitive because it is required to make an intermediate stop at Red Deer. According to the Official Airline Guide (May, 1972) the only other carrier operating between the two cities is CP Air which serves the Edmonton International Airport.

The growth in traffic in the Calgary-Edmonton market would suggest a need for almost continual air service improvement with the possible introduction of competitive service at some point in the near future. However, in order for such service to be truly competitive it must operate non-stop between the two cities and also serve the Edmonton Industrial Airport. The constraints placed on further traffic development at the Industrial Airport would appear to inhibit the

further development of competitive service.

Referring to the second point, there are certain communities throughout the Province which require air service but which generate insufficient traffic to make the service economically justified. These include communities in the northern part of the Province for example where access can be a problem or communities similar to Fort McMurray or Rainbow Lake that may have evolved because of resource development. In both instances there is a need for air service but some form of assistance may be required in order to sustain it.

In 1966 the Air Transport Board of the Federal Government enunciated a "subsidy policy for regional air carriers" which, in part, provides for subsidies:

(1) Where air service is needed to a remote area which requires the maintenance of regular air service for its existence; and where other means of transport are inadequate or non-existent.

(2) Where a developmental activity is involved and air service is essential to the support of that activity.

This policy may, in fact, provide the necessary vehicle for the implementation of air service at many of

Alberta's smaller and more remotely situated communities.

C. Transborder Service

Western Airlines and Hughes Air West presently provide direct non-stop service between Calgary and the three United States centres of Great Falls, Spokane and Denver. However, Edmonton does not presently have non-stop airline service to any United States markets. While CP Air provides single-plane service to San Francisco from Calgary and Edmonton in both instances an intermediate stop is required at Vancouver. Similarly air travel to New York, Chicago and other major United States markets is only possible through connecting flights.

The fact that some of Alberta's major external air travel markets are located in the United States would suggest a need for air service improvements. Table XII provides 1970 origin-destination traffic figures for the ten major United States markets of both Calgary and Edmonton.

It is instructive to note that New York, Los Angeles and San Francisco are Edmonton's top three transborder markets while they rank amongst the top four in the case of Calgary. Notwithstanding the fact that these

TABLE XII

ORIGIN-DESTINATION TRAFFIC

BETWEEN CALGARY/EDMONTON AND TEN MAJOR

UNITED STATES MARKETS, 1970

Los Angeles	14,105	New York	7,380
New York	10,950	Los Angeles	6,755
Denver	10,815	San Francisco	6,220
San Francisco	8,205	Honolulu	4,100
Seattle	6,490	Seattle	3,710
Honolulu	6,300	Chicago	3,090
Houston	6,470	Portland, Ore.	1,885
Spokane	5,820	Minneapolis/St. Paul	1,650
Las Vegas	5,440	Miami	1,390
Dallas	5,270	Philadelphia	1,230

Source: Air Passenger Origin and Destination Canada-United States Report, 1970, Aviation Statistics Centre

markets represent a sizable volume of traffic, neither Calgary nor Edmonton has direct non-stop service to any of these three cities.[1] In fact, in the case of the New York market, Calgary and Edmonton passengers must rely exclusively on connecting flights, and to beyond cities such as Baltimore or Atlanta, often a minimum of two connections are required.

Calgary generates considerable traffic in the Dallas

1 Edmonton presently has single-plane service from New York, but this is only to facilitate airline scheduling.

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Source: Air Passenger Origin and Destination Canada-United States Report, 1970, Aviation Statistics Centre

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Calgary generates considerable traffic in the Dallas

1 Edmonton presently has single-plane service from New York, but this is only to facilitate airline scheduling.

and Houston markets, yet, in neither case is there single-plane service available today. Passengers travelling between Calgary/Edmonton and Dallas/Houston must normally make connections at Denver. This is surprising when one considers for a moment the considerable volume of traffic in these markets and the community of interest which exists between the four cities with respect to the petroleum industry.

Next, Chicago is Edmonton's sixth busiest transborder market and, while it is not shown in Table XII Chicago ranks eleventh amongst Calgary's transborder markets with a 1970 traffic volume of 4,790 passengers. Together, the Calgary and Edmonton figures represent a sizable volume of traffic in the local Chicago market. More importantly, however, a direct non-stop flight to Chicago would mean connecting with the major transportation hub in the United States Mid-West from which direct access may be gained to almost every major point in the United States. Finally, Honolulu is Edmonton's fourth busiest United States market, while it is Calgary's sixth. Together Calgary and Edmonton accounted for 10,400 passengers in the Honolulu market. This, of course, does not include the considerable volume of charter passengers travelling on non-scheduled flights. Yet again, there is presently no single-plane service and

passengers must rely upon connecting flights.

Previous studies[1] conducted by LaBorde Simat Ltd. have shown that there is sufficient traffic in the Los Angeles, New York, Chicago, and San Francisco markets to support non-stop service at either or both Calgary and Edmonton. Furthermore, a recent investigation prepared for the Transportation and Development Authority of Calgary revealed that a service between the three petroleum rich areas of Texas, Alberta, and Alaska is justified based on current traffic estimates. Finally, the volume of traffic in the Honolulu market suggests that at a minimum, single-plane service is justified.

It is apparent from the foregoing analysis that a number of deficiencies exist with respect to the level and quality of air passenger service at Alberta communities. Moreover, further deficiencies are likely to appear in the future as traffic volumes increase.

Lack of adequate air passenger service, whether it be transcontinental, transborder or regional, is likely to affect the development of the Province in

1 (a) Alberta-California Air Bridge Study
(b) Air Service Requirements of Calgary, 1969-1973
(c) A confidential study prepared for a Canadian carrier which examined the market for a direct air service between Calgary, Edmonton and Chicago.

the following ways:

(1) Limit the development of tourism within the Province.

(2) Impede the movement of traffic into major Canadian and United States markets with which Alberta shares a large community of interest

(3) Limit access into remotely situated centres in the northern part of the Province

(4) Limit the development potential of smaller Alberta centres, and

(5) Impede development of newly emerging resource centres.

While the Provincial Government has limited jurisdiction over aviation matters there is a need to mount a sustained effort to convince the airlines and the Federal Government of Alberta's need for additional domestic air services. Furthermore, where there is a recognized need for additional international and transborder services the Provincial Government should submit evidence supporting such services to Canada's bilateral negotiating teams in order to ensure that the Province's interests are properly represented in this regard.

There are basically two alternative courses of action

available to the Province in seeking improved levels of air passenger service. First, the Provincial Government could develop a study detailing the need for improved services at Alberta communities employing the following criteria.

(1) The volume of existing local and connecting traffic,

(2) Social and economic need,

(3) Availability of alternate passenger modes

(4) Availability of alternative air service.

It could then pursue a program with the airlines and the Federal Government to gain air service improvements where a need for such service is indicated.

The second option available to the Province would be to expand Provincial jurisdiction in matters relating to the provision of air passenger service, particularly where it relates to Provincial development goals and the provision of regional or intra-provincial air services. However, this course of action would entail basic revisions to the Aeronautics Act and therefore should only be considered as a long-term objective.

It is recommended that the Provincial Government adopt

the first approach. That is, it should prepare the necessary evidence supporting the need for additional air passenger service and then enter into negotiations with the airlines and the Federal Government to obtain needed improvements. As a longer term objective the Provincial Government should seek revisions to the Aeronautics Act so as to obtain expanded jurisdiction in aviation matters, particularly where they relate to intraprovincial aviation.

II Provincial Airstrip Development

Until now airstrips within Alberta have evolved in response to specific needs with little consideration being given to the overall development goals of the Province. As an example, many airstrips have been developing specifically to serve the fire-fighting needs of the Alberta Department of Lands and Forests. However, airports should not develop solely in response to a specialized need but should form part of an overall transportation network designed to stimulate industry, tourism and resource development throughout the Province. Equally important, an airstrip program should help facilitate social and economic exchange among communities.

In 1969 the Government of Ontario enunciated an airstrip development program which resulted from a "recognition of a need for a system of highways in the sky to provide an accessibility which is not satisfied by other transportation systems". Ontario's needs in this respect are similar to those of Alberta. Both provinces enjoy an extensive tourist trade and both are characterized by resource centres and sparsely populated northern areas where access can ofttimes be a problem.

<u>The Government of Alberta should thus embark on a carefully structured airport development program which is designed to complement the overall development goals set forth by the Province.</u>

The objectives of the program should be as follows:

(1) To facilitate the movement of personnel, equipment, and supplies into proven and potential resource areas.

(2) To facilitate access into isolated areas, particularly in Northern Alberta, where transport alternatives are limited.

(3) To promote the development of industry and commerce in smaller Alberta communities where the lack of such facilities can hamper development opportunities.

(4) To promote tourist traffic at recreation areas and National and Provincial parks throughout the Province.

The important issues confronting the Province in airport development are threefold: financing, zoning, and environmental considerations.

As in all such undertakings financing airport development can create some major problems. However, a needed incentive for airport development was provided recently when the Federal Ministry of Transport announced additional funding for such facilities.

> The existing annual amount of $1,000,000 available for assistance to municipal airport construction and development projects will be continued. An additional sum of $1,000,000 will be provided annually ...
>
> For the fiscal year 1972-73, Parliament will be requested to approve an additional amount of $1,000,000, to further assist the program.

The question that immediately arises is whether in fact the ultimate amount of $3 million is sufficient to support airport development in all ten provinces

as well as the Yukon and Northwest Territories. Airport construction can be very costly and these costs can vary considerably depending on the topography of the region as well as the navigational aids that are incorporated into the design of the facility.

In addition, under the Provincial Department of Lands and Forests program, $1.8 million was spent during the 1969-70 fiscal year in the construction and maintenance of airstrips within the Province. Other forms of airport financing have been made available privately as well as through Provincial Government aid to the Alberta Aviation Council in their program of airstrip development.

The important problems in the area of financing fall into three basic categories. First, there is the problem of ensuring that sufficient capital is made available in order to pursue a coordinated airport development program within the Province. Second, there is the need to coordinate spending under one Provincial body to ensure that the objectives and conditions of the overall program are adequately met. Finally, there is the need to ensure that sufficient monies are made available to sustain

the operation and maintenance of the airport facility. Landing fees, fuel taxes and terminal charges are examples of sources of revenue for sustaining airport operations.

The second major point has to do with preserving the environment in the vicinity of airports. Of course, the amount of environmental disturbance caused by an airport will depend on the size of the facility and the consequent frequency and characteristics of aircraft operations. As an example, an infrequently used emergency airstrip will not have the same environmental impact as a major jet-port. However, in the development, planning and construction of an airport facility consideration must be given to such factors as noise levels, pollution and crash hazards.

Finally, in developing an airport serious consideration must be given to the zoning implications of the proposed facility. It is essential that the area surrounding an airport facility be zoned in such a way so as to ensure that the airport operations are compatible with authorized land uses. With regard to airports within the Province, proper zoning may involve three separate jurisdictions: Federal, Provincial, and Municipal

Governments. The Federal Government reserves for itself the right to specify building heights in the vicinity of airports. The Municipal or Civic Government, on the other hand, can prescribe zoning regulations in the vicinity of airports in order to protect local residents from aircraft noise and potential crash hazards. However, the role played by the Provincial Government in airport zoning and siting does not appear to be well-defined.

Colin McNairn in a paper entitled Aeronautics and the Constitution had the following to say concerning the Province's role in airport siting and zoning. "The Provincial interest in the siting of major airports is far reaching. A large airport provides jobs and a general stimulus to the economy of the locality. It interferes with residential development in the immediate vicinity but provides a boost for commercial development in the area. In short, it exerts a general influence, by its location, on patterns of urban growth". The Province would therefore appear to have a legitimate interest in airport siting and zoning. Its role becomes even more apparent when one considers the large sums the Provincial Government spends to provide ancillary airport services such as highways and expressways.

In summary, it should first be recognized that Provincial growth and development will not reach desired levels of achievement without a coordinated program of airport expansion. A lack of a suitable network of airstrips will impede the Province's development in the following ways:

(1) Inhibit resource development by limiting access into prospective resource areas.

(2) Limit the industrial and commercial development of well-established smaller communities.

(3) Limit the development of tourism at recreation areas and National and Provincial parks.

(4) Limit access at isolated communities, particularly in Northern Alberta, and thus impede their social and economic development.

The Province's objective should be to achieve a suitable degree of airstrip development which fosters the social and economic development goals of the Province and which forms an integral part of other transportation networks, both nationally and regionally.

The Provincial Government basically has two different

options available to it with respect to airstrip development within the Province. First, it could leave airstrip development to those parties having a direct need for such facilities such as industry, rural communities and departments of government with financial assistance forthcoming from the two senior levels of government. Secondly, the Provincial Government could establish an airstrip development policy for Alberta which would be directed toward the overall achievement of the Province's social and economic goals.

The need for a coordinated network of airstrips would, in turn, suggest a need for a positive approach on the part of the Provincial Government. It is therefore recommended that the Government adopt the second alternative and establish an airstrip development policy for the Province. This policy would have as its basic objectives the following:

(1) Promote the development of prospective resource areas.

(2) Facilitate access at isolated communities.

(3) Promote development of industry and commerce in smaller communities.

(4) Promote tourism at recreation areas.

(5) Promote social and economic ties between widely separated communities within the Province.

(6) Develop a system of airstrips which is fully integrated into other systems and modes of transportation.

(7) The creation of a single agency within the Provincial Government which will coordinate the planning and capital financing of Provincial airstrip development.

(8) The creation of new sources of financing for airstrip development.

III Development of Air Cargo Services

Traditionally, it has been a fact that only three types of goods moved by air. First are the very high value commodities, those exceeding five dollars per pound. Second are parts and supplies moving under emergency conditions where transportation costs are an irrelevant fact. And third are highly perishable goods such as newspapers, fresh vegetables and even high fashion items.

The advent of larger jet aircraft promises some reduction in line-haul costs which will mean that air cargo will be more competitive with other conventional modes. However, studies by Simat, Helliesen & Eichner, Inc. have shown that the

major cost savings are yet to be achieved in the terminal or ground handling area. Shipper packing of containers is one recent development which is effecting major cost savings for the airlines with consequent rate reductions for the shipping public.

Table XIII illustrates the significant growth that air cargo in Alberta has experienced in the five-year period between 1965 and 1970.

TABLE XIII

ENPLANED AND DEPLANED CARGO[1] AT CALGARY AND EDMONTON

1965 AND 1970

(thousands of pounds)

	1965	1970	Percentage Increase
Calgary International	5,497	17,494	218%
Edmonton International	7,048	15,121	115
Edmonton Industrial	7,248	7,811	8
Edmonton Total	14,296	22,932	60
Alberta Total	19,793	40,426	104%

Source: Airport Activity Statistics, Aviation Statistics Centre

1 Includes revenue freight, express and excess baggage

As in the case of air passenger traffic the volume of air cargo at the three Alberta airports grew by an average of over 15 percent annually during this five-year period. If this rate of growth continues into the future, it will have major implications

for Alberta's major airports because of the added strain it will place on ground handling facilities. While all commercial aircraft are capable of carrying belly cargo, Calgary and Edmonton are also served by aircraft operating in a mixed configuration where the main cabin carries up to sixty-nine passengers and seven cargo pallets. These flights are operated by Air Canada and serve both cities on a once-daily basis. In addition, Edmonton is served by a pure freighter operating five days a week.

Air Canada presently maintains a 14,000 square foot air cargo terminal at Calgary and a 6,000 square foot facility at Edmonton International Airport. However, construction is about to commence on a 5,000 square foot addition to the Edmonton facility.

Discussions with airline representatives indicated the following problems with respect to air cargo handling at Calgary and Edmonton.

(1) Lack of taxiways and aprons at Air Canada's cargo terminals in Calgary and Edmonton.

(2) Lack of space in Air Canada's Edmonton terminal.

(3) Delay in Customs appraisal. While all perishable and live goods must be cleared through Customs immediately, a Customs

appraiser must be on hand to assess duties on non-perishable items. A Customs appraiser is normally on duty between 8 a.m. and 4 p.m. and any non-perishable goods arriving before or after this time period may encounter some delay in the cargo terminal.

The growth in air cargo holds a great deal of potential for Alberta because of its landlocked position and its distance from major markets. In the future it is likely that a greater variety of goods will be moving as air cargo which should create added opportunities for Alberta industry. Air cargo will provide a particularly viable alternative where time, warehousing, damage, perishability and depleted inventories tend to be a problem.

In light of the industrial opportunities offered by air cargo services it is recommended that the Provincial Government pursue the following program:

(1) Initiate a program to alert Alberta based manufacturers as to the advantages which air cargo may offer.

(2) Encourage Alberta firms to re-examine their distribution costs to determine whether air cargo offers a viable alternative to existing shipping methods.

(3) Encourage and promote coordinated ground-handling facility and access designs and concepts, capable of coping with projected cargo volumes.

(4) Encourage efforts toward eliminating the problem of clearing inbound shipments through Customs appraisal and other similar bottle-necks.

(5) Monitor air cargo services and demand and wherever markets are under-serviced bring this to the attention of the airlines.

IV Intraprovincial and Extraprovincial Highway Development

Further highway development will form an essential part of provincial transportation policy because of the stimulus it will provide to industry and tourism and because of the existing need to open up remote northern regions. Two areas of particular concern should be the development of a roadway connecting Alberta with the Canadian Arctic and an improvement program to up-grade the Yellowhead Highway.

Alberta is connected to the Northwest Territories by way of the Mackenzie Highway which now only extends as far north as Fort Simpson on the Mackenzie

river. Beyond Fort Simpson the only method of travel is either by river barge in the summer or by winter toll road.

The Province of Alberta has a direct interest in promoting the development of a permanent all-weather highway along the route of the Mackenzie River. First, the Mackenzie River forms the major population axis in the Northwest Territories with numerous communities placed along its route. Secondly, there is every likelihood that either an oil or gas pipeline, or both, will be built along this same route and an all-weather highway would provide a means for moving in equipment and supplies for this project. In both cases Alberta could very well become a major staging area for supplying the northern economy.

British Columbia is also well connected with the north by way of a system of roads into the Yukon Territory, and with the completion of the Dempster Highway, surface travel will eventually be possible as far north as Tuktoyaktuk. It is essential, therefore, that Alberta pursue the development of a highway along the Mackenzie River in order to secure its position with respect to the development of the northern economy.

Two major concerns with regard to the development of such a roadway are the engineering problems associated with muskeg and the financing of such an endeavor. In a recent announcement the Federal Government made clear its intention to pursue the development of a highway along the Mackenzie River. It was suggested at that time that a toll would be levied on the users of the highway, particularly the companies involved in the construction of the proposed oil and gas pipelines.

The Yellowhead Route runs east-west through Edmonton and is essentially Edmonton's counterpart to the Trans-Canada Highway. However, there is a need for considerable up-grading along this route. According to the Alberta Department of Highways, there is a requirement for a new road alignment between Mundare and Vegreville. West of the city a four-lane highway as far as Seba Beach will likely be required within the next five years in order to accommodate increased traffic. In addition, the four foot shoulders between Wildwood and Edson will need to be replaced by ten foot shoulders. On the British Columbia section of the Yellowhead route widening of the highway will be needed within the next few years, again to accommodate growing traffic demand.

To summarize the problem, there are instances where intra or extra-provincial highways are either non-existent or insufficiently developed to accommodate traffic needs or to enable ease of access to certain areas inside and outside the Province. This is particularly evident with regard to the prospective needs in northern development.

Lack of adequate highway systems will affect the Province in the following ways:

(1) Limit access to certain isolated areas such as the northern economy along the Mackenzie River.

(2) Limit tourist traffic in certain areas of the Province.

(3) Limit motor carrier transport in certain areas of the Province which will detract from the industrial development potential of these areas.

(4) Limit trade and commerce between Alberta communities and centres lying outside the Province.

The Provincial Government's role in this regard should be to encourage the development of a highway system which facilitates growth in tourist trade,

encourages industrial development in smaller communities and provides access to areas, both isolated and otherwise, inside and outside the Province.

The Province's immediate objectives in this regard would appear to be clear-cut. It should first initiate a major improvement program to bring the Yellowhead Route through Edmonton up to a standard comparable to the Trans-Canada Highway. Secondly, the Provincial Government should prepare a study which examines the impact on the Alberta economy of an all-weather highway along the Mackenzie River. Using this study as a bargaining tool the Provincial Government should then negotiate at the Federal level for an early construction start on this highway.

V Urban Transportation

A major area of concern confronting Alberta's two largest cities is the growing number of automobiles and the traffic problems that are the natural outcome of urban sprawl. In Calgary and Edmonton, there is an increasing need for expressways and/or rapid transit systems which can accommodate the growing volume of commuter traffic.

Discussions with traffic engineers in the two cities revealed that a decision point is rapidly approaching concerning further investment in urban transportation. A decision must be made to determine whether large sums will be invested in further expressway development or whether greater emphasis will be placed on the development of rapid transit such as subways and express buses. The first alternative gives rise to certain problems associated with further congestion and the automobiles unfortunate role as a major polluter while the second involves a very substantial capital investment. Also, there is no guarantee that a subway will be patronized to the extent needed to cover its cost.

The major factor with respect to expressways is that they may represent an inefficient allocation of resources since they are normally designed to handle peak traffic loads and remain underutilized during the remainder of the day. It is suggested by the City of Edmonton that a more economical way to handle peak traffic is to de-emphasize the role of the expressway (and the private automobile) and supplement the roadway system with streetcar or bus transport during peak hours. While initially this may appear to be a workable solution, there is still the necessity to overcome the commuter's

inherent attachment to the automobile. Such a suggestion may therefore not be practical if it is contrary to conventional attitudes.

The City of Calgary has embarked on a project called the Blue Arrow Bus Express System (BABES) which will test the overall patronage for an improved transit system. This scheme will see the use of express buses over a highly travelled route extending from northwest Calgary through the downtown area and terminating in the southeast part of the city. The program will test the park-and-ride concept and determine what degree of patronage to expect for a rapid transit system. It could very well form the basis for further investment in a more permanent type of rapid transit system.

The major problem facing the two cities in this regard will be finding the necessary capital with which to finance the future development of transportation systems. According to the Calgary Plan, The City of Calgary is forecasting a total transportation expenditure of $645 million between 1970 and 1986, or an average of $40.3 million per year. The City of Edmonton, on the other hand, is anticipating a minimum annual expenditure of $15 million over the

next seventeen years and this does not include any provision for major expressways or rapid transit which will require extra expenditures.

Discussions with traffic planners in both cities revealed that the local tax base is not sufficient to support this type of development. Furthermore, while the Provincial Government contributes up to 75 percent for freeway development and up to 50 percent for expressways, additional financing will likely be required either from the Federal Government, or possibly through public bond issues. A desire was expressed by the City of Calgary for a greater degree of involvement on the part of the Provincial Government in matters relating to urban transportation. In particular, it was felt that the Provincial Government should represent the interests of both cities in seeking capital assistance from the Federal Government.

In summary, Alberta's major urban centres are confronted with the problem of expanding transportation facilities particularly to meet the demands of rush hour traffic. The problem also extends to the planning and lack of financing of roadway, expressway and rapid transit development.

Lack of adequate financing and planning and the

consequent underdevelopment of urban transportation facilities could result in the following problems as outlined in the Calgary Plan.

(1) Continued outward expansion in the suburbs, without adequate development of an inner transportation network or alternative approved policies for handling traffic (ring-roads).

(2) Low functional standard of most major streets due to:

  (a) Insufficient right-of-way widths.

  (b) Uncontrolled access and too frequent intersections.

  (c) Lack of continuity.

(3) Insufficient river bridge and railway subway crossings.

(4) The penalty which will be exacted if we continue to delay progressive improvement of our transportation system; the eventual use of every local through street for non-local traffic.

(5) Failure to separate vehicular and pedestrian traffic resulting in danger to children due to existing on-street parking practices in residential areas.

(6) Traffic congestion through conflict with slow public transit.

(7) Low standard of aesthetic treatment of boulevards, median strips, and general street signs and street furniture.

Apart from these problems are also the costs borne by the public at large for delaying or postponing investments in needed transportation facilities. These include the economic cost incurred by the traveller due to increased travel time occasioned by greater congestion or conversely deterioration in average speed. There is also the cost incurred for waiting caused by the effects over time of inflation on construction costs.

The objective of the Provincial Government should be to ensure that sufficient resources are made available, both with respect to planning and financing, to enable the Province's major urban centres to undertake the development of transportation systems needed to meet their present and future traffic requirements and to ensure the continued attractiveness of those centres as places in which to live.

With respect to the financing problem there are three alternatives available to the Provincial Government. First, the Province could increase

the level of grants to urban centres to assist in transportation development. Secondly, the Province could represent the interests of Alberta's urban centres in negotiations with Federal Government agencies in order to obtain further capital funding for urban transportation projects. Thirdly, the Province could go to the open market for funding through transportation bond issues.

It is recommended that the Provincial Government examine the relative merits and the limits of financing under each different scheme. The Government should then choose an appropriate method or combination of methods which will provide the needed funding for urban transportation development.

With respect to the planning function the Provincial Government should consider the establishment of a Government agency to undertake research and planning in urban transportation. It is proposed that this group would work with similar bodies already in existence at the urban level.

VI Seaway and Port Development

While Alberta may be a landlocked province it is essential that it retain an interest in seaway

developments as well as developments at eastern and West Coast ports. A number of problems have arisen recently which confirm the need for provincial participation in such matters.

The first problem relates to the handling capacity for grain and other commodities at West Coast ports. If Alberta is to benefit from export trade to China, Japan, Europe, and other major markets, then it must ensure that West Coast port facilities are capable of handling this traffic.

To illustrate this point it is interesting to note the relative grain storage capacity of West Coast ports compared to the relative flow of grain shipments. According to the Canada Year Book, Pacific Coast terminals in 1969 had a total storage capacity of 29.7 million bushels compared to 107.3 million bushels for Thunder Bay. However, in the 1969-70 crop year Vancouver accounted for almost 41 percent of Canada's export grain traffic which represented 184.4 million bushels. Moreover, Japan and China ranked among Canada's top three export grain markets, accounting for 78 million and 65 million bushels, respectively.

Consideration has recently been given to the further

development of grain handling facilities at Prince Rupert. This development would offer two distinct advantages. First, it would relieve some of the congestion at Vancouver ports, and, secondly, it would make possible an alternate rail route for moving grain to the West Coast. This latter point is particularly critical because of snow slide conditions through the mountain passes which can bring grain traffic to the West Coast to a total standstill. An alternate rail route and port facility would provide an opportunity for re-routing this traffic.

It is noteworthy that an expanded port facility at Prince Rupert would have helped to alleviate the congestion at Vancouver caused by the United States longshoremen's strike in 1971.

The second problem relates to current efforts to increase the bulk handling capacity at Vancouver. Port facilities in Vancouver's inner harbour are disadvantaged in many ways and this has given rise to the bulk handling facility at Roberts Bank. The Roberts Bank facility is constructed on fifty acres of land reclaimed from the ocean, however, this entire area is currently being used for the exclusive handling of eight million tons of coal per year.

The Roberts Bank facility offers a number of advantages over Vancouver's inner harbour. First, it can handle much larger vessels than the inner harbour. This is particularly important since the Japanese are desirous of using larger vessels so as to achieve lower unit costs. Secondly, the Roberts Bank facility allows faster turnaround time for incoming trains. The major reason for this is that trains destined for Roberts Bank bypass the Vancouver marshalling yards. Thirdly, Roberts Bank is not confronted with the same environmental problems that the inner harbour is faced with. Where bulk commodities such as coal, potash and sulphur are being handled, considerable "dusting" can occur which is much more of a problem in the inner harbour because of the close proximity of residential areas. Fourthly, the bulk handling of sulphur, for example, is now being conducted by two separate facilities in the inner harbour while one large facility at Roberts Bank will offer considerable economies of scale. Finally, the Roberts Bank facility offers much larger storage potential which will lessen the chance of delay for incoming vessels due to depleted inventories.

The major problem with respect to further development of Roberts Bank is opposition from the inner harbour

port operators who view the new facility as a major threat to their livelihood. Active support for the Roberts Bank development on the part of the Alberta Government would be one important way of offsetting this opposition.

A third major area of concern for the Alberta Government will be any new developments relating to the St. Lawrence Seaway. The Seaway is of prime importance to Alberta because it offers many of the low-cost advantages that are traditionally associated with water transportation. This is particularly true with respect to the eastward movement of low-valued bulk commodities which may originate in Alberta.

In a major study prepared for the St. Lawrence Seaway Authority by D. Wm. Carr & Associates Ltd. it was suggested that seaway tolls be increased in yearly increments of five percent over a five year period. Such a move is likely to have an impact on the Province depending, of course, on the type and volume of traffic affected by the increase. While it is not the intention of the present study to thoroughly analyze the implications of such action, it is suggested that the Provincial Government develop a position with respect to such seaway developments so as to ensure that the interests of

provincially based industry are properly represented.

The fourth and final area of concern is the further development of port facilities at Churchill, Manitoba. The main function of the Port of Churchill has been to provide alternate routing for grain exports out of the Prairies, primarily destined for the United Kingdom and Western Europe.

A major disadvantage of the Port of Churchill are the severe ice conditions which limit the open navigation season to an average of 82 days per year, between the latter part of July and mid-October. The Port of Churchill offers an alternative channel for the export of Alberta commodities such as grain, forest products and general cargo. In addition, Churchill should be considered by the Provincial Government and the petroleum industry for its potential as a staging area for moving oil and gas exploration equipment from Alberta into the Far North.

While the Province of Alberta has no direct control over port and seaway operations, it should ensure that its interests are suitably represented on any port or seaway development, especially where it relates to tolls, charges and physical handling

capacity. It is particularly important that Alberta take whatever action is possible to ensure that these facilities are adequate to handle present and future volumes of Provincial export traffic as well as any traffic moving domestically through the Seaway.

The lack of adequate port and seaway facilities and the levying of unreasonable fares and charges will affect the Provincial economy in the following ways.

(1) Inhibit the efficient flow of Alberta export goods which will slow delivery and jeopardize the Province's competitive position in foreign markets.

(2) Slow delivery to export markets owing to a lack of alternate port facilities and sufficient handling capacity to accommodate traffic in the event of snow slide conditions in the mountains, labour disputes and other emergency situations.

(3) Add to the cost of moving Alberta-produced goods to foreign markets and thereby limit the competitiveness of Alberta-based firms in these markets.

It is recommended that the Provincial Government

pursue the following program in order to rectify current inadequacies in port and seaway operations and eliminate future impediments to Alberta's export trade.

(1) Negotiate with the National Harbours Board for further expansion of the port at Prince Rupert in order to alleviate the congestion at Vancouver and to provide a viable alternate for routing traffic to the West Coast.

(2) Negotiate with the National Harbours Board and the Vancouver Port Authority for further development of Roberts Bank to enable the handling of a broader range of bulk commodities as well as general cargo and container traffic.

(3) Carefully evaluate any development affecting seaway operations such as the proposed toll increase to determine its impact on Alberta-based industry. If necessary, make representations before the St. Lawrence Seaway Authority in order to insure that Provincial interests are properly protected.

(4) As a long-term objective, examine the need for possible Provincial representation on Seaway and Port Authorities that are vitally important to Alberta's future trade development.

VII Discontinuance of Rail Passenger Service

This is a contentious issue because while discontinuance poses an inconvenience to the residents of these communities and a setback to economic growth and development, the railways have in most instances provided evidence which has shown that the service has been underutilized. However, it is not clear that the best rebuttal cases have been presented in opposition to proposed service suspension.

The discontinuance of rail passenger service is a problem that must be viewed in terms of its social and economic consequences. It has always been recognized that a community's ability to attract commerce, industry and new residential development depends to a large extent on the availability of adequate transportation. The ability of a community to develop and grow is therefore hampered by the discontinuance of rail service, particularly where the availability and quality of alternate transport modes is limited.

The availability of rail passenger service may also permit an added degree of social exchange with other communities. Therefore, the discontinuance of such service could reduce the attractiveness of a community as a desirable place in which to live.

It is apparent that the discontinuation of rail passenger service may in some instances result in a certain degree of social and economic stagnation within Alberta communities. This, in turn, can undermine the effect of any effort on the part of the Provincial Government to encourage development in smaller Alberta centres. However, these effects must be balanced against the cost of maintaining and, in some instances, subsidizing a service for which there is insufficient traffic.

To summarize the problem, the railways have taken action to discontinue rail passenger service at a number of Alberta communities which can adversely affect the social and economic development of these communities and consequently the Province as a whole.

The discontinuance of rail passenger service does, other things being equal, have the following effect on a community. First, it can limit a community's ability to attract industry and commerce and to facilitate the ongoing operation of existing community enterprise. Secondly, it can limit social and economic exchange with other communities.

The Province's goal with respect to this problem should be to ensure that adequate rail passenger

service is maintained where the public need requires the provision of such service.

The Provincial Government could allow the railways to pursue a program of discontinuance unabated. However, the fact that the Provincial Government will wish to preserve a certain quality of life in smaller communities again suggests the need for a more positive approach on its part. In this respect there are three alternatives available to the Province.

First, in each instance, the Provincial Government could review the relative merits of discontinuance in terms of:

(1) The existing volume of traffic
(2) The effect of discontinuance with respect to Provincial development goals.
(3) The social and economic impact on the community or communities involved.
(4) The availability of alternative passenger modes.
(5) The ultimate cost to the public.

If, after this, discontinuance is felt to be unwarranted, then the Provincial Government would make formal representation before the railways and the Railway Transport Committee advocating

continuance of service.

Secondly, the Provincial Government could strive for a commitment on the part of the Federal Government to provide service by an alternate mode where discontinuance of rail passenger service is allowed. Thirdly, where the second alternative is not possible, the Provincial Government could apply for the needed authority to enable it to subsidize rail passenger service unilaterally.

It is recommended that the Province adopt a policy which, in effect, encompasses all three alternatives. In other words, where discontinuance is proposed by the railways the Provincial Government should examine the implications of such action using the aforementioned criteria. If discontinuance is found to be unjustified and if subsequent representations by the Provincial Government prove unsuccessful, then the Province should ask for a commitment from the Federal Government to provide passenger service by an alternate mode. Alternatively, the Province should apply for the authority to subsidize the needed service unilaterally.

CHAPTER 7

REGULATION IN THE MOTOR CARRIER INDUSTRY

I. Motor Vehicle Weights and Sizes

The motor carrier industry is generally recognized to have been a major competitive supply factor in the transportation of goods and people within the Province and between Alberta and its market or supply points. Without the development of the long-haul highway transport industry during the last 20 years there is no doubt that charges for the transportation of much freight between Alberta and Eastern Canada, the United States and the West Coast would be higher than they are today. The economy of Alberta can be substantially assisted by Provincial Government action to cause the highway transport industry to be an even more competitive alternative to other modes, particularly the railways. On the great majority of freight requiring movement to, from, or within Alberta, no other method of transportation is presently capable of providing such competition and thereby minimizing freight transport costs for Alberta industry. Given the natural obstacle of great distance from large volume markets, further industrial development in

the Province will be difficult to achieve without the presence of a vigorous, aggressive, competitive transportation alternative to what otherwise would be a monopoly mode.

Most of the contributions of technology to road transportation have been achieved by increasing productivity. Improved economics in motor freight movement have been acheived by increasing the size, permissible weights, and speeds of vehicles, rather than by increased technical performance. There are further improvements that may be achieved in Alberta that will further increase productivity.

Transportation productivity, particularly in the realm of vehicle weights, sizes and speeds, needs careful evaluation. The social and economic advantages need to be weighed against the capital and operating costs of providing and maintaining the accompanying transportation facilities. A definition of the problems and limitations associated with transportation productivity needs careful evaluation and should be directly related to the formulated transportation policy and plan of the Province.

Several of the provinces have recently made significant increases in permissible gross vehicle weights. These

increased weights are subject to specific regulations on axle spacing, loading, tire sizes and horsepower ratios. Certain of the provinces have restricted these higher weights to designated routes.

British Columbia, Ontario, Quebec, New Brunswick, Prince Edward Island and Newfoundland have increased permissible gross vehicle weights to as much as 140,000 pounds which is the limit prevailing in Ontario. Several of the provinces (Manitoba, Saskatchewan, and Nova Scotia) have established permissible gross vehicle weights in the 74,000 pound scale on all provincial highways.

The Province of Alberta currently has a fairly complex system of specifying gross vehicle weights. Alberta only allows 74,000 pound gross loads on designated highways. Other Alberta highways and most municipal roads are restricted to either 45,000 or 59,000 pound gross loads, depending upon vehicle specifications.

Higher permissible gross vehicle weights on highways, roads, bridges, streets and thoroughfares apparently offer the greatest single potential source for improved transportation productivity. Such improved productivity could result in freight transport cost

reductions or avoidance of increased costs.

The transportation industry has long sought uniformity and standardization of gross vehicle weights on provincial and state highways. The construction of the Trans Canada Highway and interstate freeways in the United States have opened up possibilities for increasing transportation productivity. However, inter-provincial and interstate trucking and bus operations are restricted in the achievement of efficiency and productivity by the restrictions imposed on weights by the states and provinces.

Considerable research, analysis and evaluation of the advantages and disadvantages of increasing vehicle weights has been undertaken by some of the provinces. Based on these evaluations, British Columbia, Ontario, Quebec, New Brunswick, Prince Edward Island, Newfoundland and the Northwest Territories made recent decisions to significantly increase permissible weights. It seems evident, therefore, that such action was considered to be of economic and social benefit in those provinces.

Progress has also been achieved in Alberta. One example is the authorization of 108,000 pound gross

weights applicable to triple bottom combinations operating on Highway No. 2 between Calgary and Edmonton, under specified conditions. There has also been progressive upgrading of weights permissible on highways previously restricted to 45,000 or 59,000 pounds.

Alberta has made many contributions to transportation productivity through its various regulatory and development arms. Continuing contributions to transportation productivity are considered to be achievable by further standardization and increases in permissible maximum vehicle weights and sizes. Such changes should be evaluated against the possible increased costs of construction and maintenance of land transportation facilities, public safety and welfare, as well as their conformance to the overall transportation policy and plan of the Province.

The present Alberta highway weight restrictions, particularly those now restricted to 45,000 and 59,000 pounds in gross, which generally apply in rural Alberta, result in:

A. High freight costs to the shipper and, ultimately, the consumer.

B. Restricted development of agriculture and secondary industry due, in part,

to these higher freight costs.

C. Increased costs to the shipper and consignee in those areas served by highways with restricted weights, where rail lines have been or will be abandoned.

D. High cost of movement of goods and services as the transporter is required to maintain three fleets of equipment if he is to match the three highway gross weight levels.

The Government of Alberta should establish as objectives:

A. A standard and uniform system of permissible gross vehicle weights within the Province that will contribute to its economic stability and growth.

B. Permissible gross vehicle weights on those highways serving interprovincial and international traffic that will permit the free movement of goods and services to and from Alberta on east-west and north-south corridors.

It appears that Alberta's solution to the permissible vehicle weight problem shoud be:

to these higher freight costs.

C. Increased costs to the shipper and consignee in those areas served by highways with restricted weights, where rail lines have been or will be abandoned.

D. High cost of movement of goods and services as the transporter is required to maintain three fleets of equipment if he is to match the three highway gross weight levels.

The Government of Alberta should establish as objectives:

A. A standard and uniform system of permissible gross vehicle weights within the Province that will contribute to its economic stability and growth.

B. Permissible gross vehicle weights on those highways serving interprovincial and international traffic that will permit the free movement of goods and services to and from Alberta on east-west and north-south corridors.

It appears that Alberta's solution to the permissible vehicle weight problem should be:

A. To standardize permissible gross vehicle weights to 74,000 pounds on all provincial highways.

B. To increase gross vehicle weights on municipal, district, and county roads that form part of the road transportation network serving Alberta's industrial base, to the provincial highway weight standards.

C. To increase gross vehicle weights on these east-west and north-south Alberta highways to the permissible weights applicable on the highways in the major industrial areas of Canada, i.e. Ontario.

The Provincial Government is in the unique position of being able to provide a base for increased road transportation productivity by implementing standardization in gross vehicle weights throughout the Province. Such action appears mandatory if rate improvement in the movement of goods and services by highway transportation is to be achieved. The alternative is higher freight costs.

By establishing gross vehicle weights in Alberta on a comparable basis to the heavily industrialized Eastern and Western areas of Canada, as well as the

North-Western states of the United States, a base for standardization would be implemented which the prairie provinces would be obligated to follow.

Such an approach in Alberta would quickly open, on a more economical base, freer movement of goods and services both inside and outside the Province, on east-west and north-south arterial highway routes.

II <u>The National Transportation Act - Part III</u>

A. <u>Extra-Provincial Motor Vehicle Undertakings</u>

Control and regulation of the extra-provincial highway transport industry is, under our laws, a Federal Government responsibility. For many years, however, this responsibility has been administered by the provinces of Canada under a loaned arrangement.

With the enactment of the National Transportation Act in 1967 it was intended that administration of extra-provincial highway transport operations would be carried out by the Canadian Transport Commission under Part III of that act. Part III has not yet been proclaimed, pending the establishment of the necessary administrative apparatus and the drafting of regulations satisfactory to the provinces and the highway transport industry.

The problem that now exists is a very real and serious problem that substantially impairs the ability of the highway transport industry to service shippers on a low-cost and efficient basis, and to be a more viable competitive alternative to the other major freight traffic mode, the railways. If a substantial base of secondary manufacturing is to be created in Alberta, industry must have available to service it, the most efficient and lowest cost possible transportation services for the movement of raw materials and semi-finished goods into its production plants and for the distribution of manufactured products from its plants to consumer markets. Given the lack of a substantial consumer market within the Province this creates an important and essential need for the transportation of goods extra-provincially between Alberta and other provinces of Canada.

Because of the fragmented nature of the administration and regulation of the extra-provincial highway transport industry as it now exists, that industry is faced with substantially higher costs than could otherwise be achieved, in attempting to transport goods between Alberta and other provinces of Canada. For example, a carrier wishing to service traffic between Alberta and provinces to the East, such as

Saskatchewan, Manitoba, Ontario, and Quebec, now is required to obtain operating authority from each of the provinces that it wishes to serve. This inevitably involves a requirement for a public hearing in each of these provinces. These procedures are very time consuming and extremely costly and frequently appeal procedures are involved which further adds to the time and cost factor.

The ability of a highway transporter to make an application and be heard by one regulatory agency in such a situation would substantially reduce the time and cost involved in these proceedings.

In a similar fashion rates for the movement of freight extra-provincially between Alberta and other provinces of Canada are regulated or controlled in a totally disharmonious fashion by each of the provinces. This again imposes unusual and costly factors on the highway transport industry and inhibits its ability to be a more efficient and lower cost transportation alternative for Alberta shippers.

For example, a highway carrier servicing traffic moved between Alberta and other provinces to the east of Alberta finds the following situation.

(1) Alberta does not require the publication,

filing or in any way attempts to control rates for such service.

(2) Ontario, on the other hand, requires that rates for the movement of goods between Alberta and Ontario be published and filed with the Ontario Highway Traffic Board, which rates are the only rates which may lawfully be charged for traffic. However, Ontario makes no attempt to control the level of such rates.

(3) Quebec, while requiring the filing of rates for the movement of goods between Alberta and Quebec, as is the case in Ontario, also requires that such rates be, in the opinion of its regulatory agency, fully compensatory to the carrier. If they are not, in its opinion, compensatory, they will be disallowed and may not be charged.

These are only brief examples of the situation that confronts the extra-provincial highway transport industry in having to deal with a number of different regulatory agencies each with quite different requirements and attitudes. The administrative burden imposed on the highway transport industry by this situation creates substantially higher costs and inefficiencies than would occur given single body having jurisdiction.

Regulations under Part III of the National Transportation Act have been drafted by an Advisory Council charged with preparing these regulations. The initial draft has been circulated to the shipping and transportation industry for their comments and the Advisory Council must now consider these comments and prepare a final draft for presentation to the Canadian Transport Commission.

The draft regulations must be considered by the Commission relative to the National Transportation Policy enunciated in Section I of the National Transportation Act and in particular to the objectives of that policy which, in part, are stated to ensure that each mode of transport, so far as practicable, carries traffic to or from any point in Canada under tolls and conditions that do not constitute (i) an unfair disadvantage beyond any disadvantage that may be deemed to be inherent in the location or volume of the traffic, the scale of operation connected therewith or the type of traffic or service involved, or (ii) an undue obstacle to the interchange of commodities between points in Canada or an unreasonable discouragement to the development of primary or secondary industries or to export trade in or from any region of Canada or to the movement of commodities through Canadian

ports.

Regulations as may be promulgated under Part III of the National Transportation Act designed to meet such broad objectives will warrant particular consideration by the Province of Alberta inasmuch as these regulations will affect the procurement and marketing of goods by Alberta based industry. It is apparent that the National Transportation Act objectives cannot be achieved given the morass of existing regulations and the variety of interpretations under present administration by the provinces under the Motor Vehicle Transport Act, Part V.

The lack of uniformity of current regulations, the variety of interpretations and inherent shortcomings in the motor transport industry greatly favour extra-provincial regulation, if the broad objectives of the National Transportation Act are to be realized. Probably the greatest single obstacle to be overcome is the variety of regulations now in existence from province to province relative to the extra-provincial operation of motor carriers. It is clear that the stated objective of the National Transportation Act cannot be accomplished excepting by some standard regulations.

The initial draft regulations appeared in general terms to be acceptable in reaching objectives as set out by the National Transportation Act without overregulating the trucking industry. However, various presentations have been made by industry and carriers for consideration by the Council prior to preparing a final draft for submission to the Canadian Transport Commission. The actual content of such revision apparently will not be available for some time, therefore specific comment cannot be made concerning the acceptability of these regulations by industry, carriers, or from the standpoint of the Province's best interests and prospective government policy.

B. Intra-Provincial Regulation of Highway Transport

The Province of Alberta has maintained a no-regulation policy as it pertains to control of entry, rates and routes of motor carriers. This policy will have to be reviewed with reference to whether or not the current policy is adequate to meet the objectives of motor transport in Alberta. Pressures other than "review for adequacy" are also certain to arise because of Part III regulations and Alberta based carriers' obvious desire for some type of regulation.

Consideration of regulations under Part III of the

National Transportation Act as they might affect intra-provincial operations bear consideration in two areas. Firstly, the objectives of the National Transportation Act, as stated earlier, appear as desirable in order to develop an adequate and efficient transportation service capable of meeting the current and future needs of Alberta's economic growth. Secondly, it is impractical to consider intra-provincial operations and regulations without considering the ramifications of extra-provincial regulation inasmuch as many Alberta carriers operate both intra and extra-provincially. Further, intra-provincial services to a great extent complement extra-provincial service in the total movement of goods. To further bolster this concept we refer to a memorandum dated December 2, 1971 from Mr. T. D. Ellison, Secretary, Advisory Council on Motor Carrier Regulation, wherein the following statement was made:

> If regulations can be devised which are acceptable to all provincial legislatures and are authorized by provincial laws, they will automatically apply to extra-provincial undertakings under the Motor Vehicle Transport Act. If these regulations were acceptable to the Federal Government, there might be no need to use Part III at all.

The current lack of regulations in Alberta relative to control of entry, rates and routes, has resulted in excessive competition and non-compensatory rates, culminating in a relatively high bankruptcy rate for motor carriers within the Province. Other effects can be observed such as unsafe equipment operations and lack of reserves to replace equipment caused by cutting costs to survive inadequate rate levels. The industry lacks the stability required for a sound highway transportation system which could be depended upon to meet and assure the requirements of Alberta development.

It would seem advantageous for Alberta to adopt a regulatory policy for the intra-provincial highway transport industry that would also be consistent and in conformity with the new regulations that will develop with respect to the extra-provincial highway transport industry. Such an action, it is believed, would substantially assist the evolution of a more stable, efficient, transport mode to service and assist in the achievement of a high level of secondary industrial development within Alberta.

In review, the issues for regulation intra-provincially might be summarized as follows.

Uncontrolled entry and lack of regulation usually results in a:

(1) Excessive and often destructive competition by virtue of low investment required to enter into a trucking operation.

(2) Rates fall below a compensatory level resulting in:

  (a) high bankruptcy rates.

  (b) unsafe equipment because of lack of maintenance.

  (c) unsafe operation of equipment by virtue of drivers being worked beyond safe limits in respect of hours.

  (d) lack of reserves to replace equipment.

  (e) inadequately paid employees.

(3) Rate discrimination by carriers for shippers of the same commodities in like circumstances.

(4) Lack of stabilization in the trucking industry resulting ultimately in erratic and poor service to the public.

The case against regulation can likewise be stated:

(1) In order to be effective regulation must be properly administered and enforced resulting in large and costly regulatory bodies.

(2) Inadequate provision for proper and forceful administration can create a more chaotic situation than no regulation.

(3) Probably less competitors will ultimately raise rates to levels above that of a non-regulated industry.

(4) Control of entry presumes the expertise of regulatory authorities to knowledgeably control the supply of transportation services which is not always correct.

A summary of regulations that might be adopted by the Province coincidental with the proclamation of Part III of the National Tansportation Act would include:

1. All carriers would require operating licences (operating authorities).
2. Provision would be made for temporary operating permits.
3. Terms and conditions of licences would be specified.
4. Required cargo, public liability and accident insurance.

5. Carriers would be required to file tariffs or tolls.
6. Provision for tariff bureaus.
7. Overseeing of transfers, mergers, consolidations, and licensing or other change of control.
8. Standard accounting and operating statistics information and reporting.
9. Conditions of carriage for goods and passengers
10. Conditions for carrying of C.O.D. shipments
11. Safety standards.
12. Enforcement and penalty procedures.

III <u>License Reciprocity</u>

The provinces of Canada, and the states of the United States, now require that all vehicles that are operated within their individual boundaries be registered and licensed in that province or state on an annual basis. There are residence and/or operating authority requirements to license procurement that vary in each province or state.

Where vehicles are operated in two or more provinces and/or states, registration (licensing) reciprocity arrangements and/or agreements were instituted by some provinces and/or states to simplify administration and enforcement procedures and to reduce costs of dual or multiple licensing, particularly in inter-provincial and international road transportation.

Licensing reciprocity systems generally characterize an exchange of operating privileges, whereby one jurisdiction allows vehicles registered in another jurisdiction to operate within the limits of its territory and, reciprocally, the other jurisdiction grants the same privileges.

Proration systems or reciprocity are characterized by the distribution of license revenue between the jurisdictions involved.

License reciprocity between provinces and/or states is generally restricted to vehicles travelling through, into or out of the province or state but does not cover operations within the province, or between terminals within the province or state.

Obtaining a vehicle license is usually conditioned upon the operator having the required operating rights or authority for specific vehicles or type of merchandise to be transported and establishing a place of residence.

Licensing costs may not represent one of the more important cost factors in motor carrier transportation. They do, however, contribute to overall motor carrier operating costs and perhaps more importantly the burden to extra-provincial operators

of dealing with a number of different administrative bodies, each with differing requirements, is a significant problem. More simplified procedures can facilitate the free flow of goods and services internationally and interprovincially if properly planned and applied. Here again, any action, particularly by the Provincial Government, that can assist in creating more effective competition between transport modes cannot help but benefit Alberta's requirement to develop a more diversified economy.

The major barriers now evident in Alberta to the development of freer movement of interprovincial and international motor carrier traffic are:

A. The extreme difficulty of Alberta carriers in obtaining I.C.C. operating authority in the United States to permit free movement of goods to and from Alberta by Alberta carriers, or, to create a land transportation corridor to the Western seaboard through the United States.

   The present Alberta reciprocity agreement with some 30 U.S. states appears to be heavily out of balance. Approximately 100 U.S. carriers hold Alberta operating authority, whereas only some ten Alberta carriers are authorized by the Interstate

Commerce Commission to operate in these states.

B. The lack of any type of reciprocal arrangement with the Province of British Columbia. This situation can only impede the free flow of goods and services to and from the Western seaboard on Canadian land routings, due to a lack of competition. Currently motor vehicles operating between Alberta and British Columbia are obliged to pay full license fees in each of these provinces. In this case there is a markedly higher freight cost than on most other extra-provincial traffic routes. The ability of the motor carrier industry to provide an effective alternate mode of freight transport is definitely impaired and the further development of secondary industry in Alberta is impeded.

The alternative vehicle licensing arrangements for Provincial Government consideration are:

A. No Reciprocity - Where there are no reciprocal arrangements between provinces or states a vehicle operator is required to meet the licensing requirements for each of those provinces or states in which he operates and must pay the full license fee in each jurisdiction.

Alberta has no effective reciprocity with British Columbia, Quebec, New Brunswick, Nova Scotia or Newfoundland.

B. Full Reciprocity - Theoretically, such an arrangement would permit a vehicle that was properly licensed in its home jurisdiction to circulate freely within all other jurisdictions that had agreed to full reciprocity.

The closest example to full license reciprocity arrangements now in effect would be the private automobile, but its reciprocity is actually restricted to its operations in a tourist role. Full reciprocity agreements are now in effect between several of the provinces and states for specific vehicle use or type of merchandise to be transported. This reciprocity arrangement is conditioned upon the "carrier" holding accompanying operating authority if and where required, in the jurisdictions that are party to the agreement.

Under this type of reciprocity a vehicle is registered and licensed only in its home jurisdiction. No licensing in the jurisdictions that are party to the full reciprocity

agreement or arrangements is required. An identification sticker or licence plate is usually a requirement for each of the jurisdictions and there is a nominal registration fee for this identification.

Alberta has full reciprocity with some 30 American states. Alberta also has, by special agreement, arrangement or regulation, reciprocity as follows:

Manitoba, Ontario, Saskatchewan

(i) Vehicles rated to have a maximum gross weight of 6,000 pounds or less.

(ii) Vehicles engaged in the transportation of natural products of the farm, forest, sea, lake or river, when transported from these points.

(iii) Vehicles engaged in the transportation of objects and materials used in the production of cultural presentations and exhibitions, provided they are not carried solely for financial gain.

(iv) Vehicles engaged in the transportation of used household goods.

(v) Vehicles engaged in the transportation of owner's own goods.

(vi) Any duly registered vehicle, engaged in interprovincial operations, and entering or going through the Province of Alberta, may be licensed in Alberta upon payment of a fee of $10.00 per ton of the maximum allowable gross weight permitted for the type of equipment being used. The same licensing regulation applies to Alberta vehicles travelling into these provinces.

Northwest Territories

Interprovincial operations on the basis of one-half the annual license fee.

Prince Edward Island

On all vehicles travelling through or into the Province for interprovincial operations.

Nova Scotia

Household goods movers.

Quebec

(i) Household goods movers.

(ii) Natural products of farm or products of dairy, creamery or cheese factory.

Proration of license revenue as part of reciprocal arrangements between the various jurisdictions are not now applied in Canada. They are applicable in several of the states.

Allocation systems between various jurisdictions have been applied as a means to distribute licence and registration fees. They are based on either revenue earned or miles travelled in the applicable jurisdiction or a combination of these factors.

Proration is intended to offer the full benefits of reciprocity but ensures that no jurisdiction penalizes itself by granting exemptions which are not fully reciprocated or utilized in other jurisdictions.

To provide for minimum restriction to the free movement of merchandise by truck transportation between jurisdictions, the Province of Alberta should have as an objective acquiring and maintaining license reciprocity and/or proration of fees on a formulated use basis, plus the accompanying reciprocal arrangements on operating authorities with all the provinces of Canada, as well as all states in the U.S.A. To achieve such an overall objective may necessitate early participation

in several different types of license reciprocity and/or proration of licensing fees to fit with reciprocity arrangements now in effect in other jurisdictions. Standardization should be an end objective.

It is recommended that reciprocal agreements should be reviewed on a regular and continuing basis in order to meet changing patterns in markets and traffic. A detailed study should be conducted every five years to evaluate trends and formulate future policy.

IV Fuel Tax Administration

Fuel tax could best be defined as a "toll charge" payable to a province when using that province's roads and highways.

The two main concerns involved with fuel taxes are:

A. The Province's inability to collect and audit the fuel taxes due from sales made within their province and taxes due from the transportation industry's use of provincial roads, regardless of where the fuel was purchased.

B. The transportation industry's attempts to

pay taxes to the provinces based on road use only, in order to avoid double taxation.

The problems facing the Government and industry under the present fuel tax system are numerous. Perhaps the most significant problem with today's fuel tax methods is that they discourage accurate reporting by the industry. The contributing factor in this is the "no-tax-rebate" policy that most provinces work under. Because of this policy the industry faces double taxation.

The effect of the present methods of accounting for and paying fuel taxes by the motor carrier industry to the government are that high administrative costs are incurred by both parties. Again, the ability of the highway transport mode to provide the most effective competition for the benefit of Alberta industry is impeded. For example, an interprovincial carrier will purchase fuel in Alberta (tax included) and part of this fuel may be used travelling on British Columbia roads. In reporting his fuel tax he would have to pay tax to the British Columbia Government based on miles travelled in that province, but would never receive a "rebate" from the Alberta Government for taxes paid at the time of his fuel purchase. To avoid this double taxation the industry must control

its purchases in order to arrive at a balance between miles travelled and fuel purchases within a given province. This is not always possible.

On the other hand, there are interprovincial carriers who, for example, will purchase fuel in Saskatchewan, travel through Alberta, (without purchasing any fuel), and on into British Columbia. In reporting their fuel tax they report to the Saskatchewan and British Columbia Governments only, and completely avoid reporting to the Alberta Government. In the majority of cases this operator will go undetected by the Alberta Government and thus the Province does not realize its due tax dollars based on miles travelled on provincial roads and highways.

It is recommended that the Provincial Government seek to achieve a greater degree of standardization with the other provinces with respect to the method of assessing and collecting taxes for road use. Standardization and reciprocity amongst the provincial governments would result in the following benefits:

A. The cost burden to both carriers and governments, without adversely affecting government tax revenues, would be reduced.

B. Tax collecting and auditing would improve with the overall "communication link" that standardization would create among the provinces.

C. Standardization would encourage accurate reporting by the industry, therefore distributing the tax dollar equitably. This would require a vehicle among the provinces for tax dollar reallocation.

D. The result of standardized reporting would also improve accuracy, therefore improving the collection and auditing procedures.

E. Standardization could eliminate the Government's dependence on the transportation industry's documents to audit fuel tax collection at the wholesale and retail sales level.

CHAPTER 8

TRANSPORTATION RESEARCH

The foregoing analysis indicates the existence of some challenging transportation problems, many of which are uniquely related to Alberta's industrial and tourist development. This would suggest that there is still much research remaining to be performed to find solutions to existing transportation problems and to determine the need for new transportation technology.

I Organizational Considerations

While there are research bodies already established within the Ministry of Transport and the Canadian Transport Commission, much of the work performed by these groups is either regional or national in scope. It is important that Alberta develop transportation systems which fit into the regional and national fabric, however, it is equally important that it develop systems which meet the specific needs of the Province and which coincide with its overall development goals.

There are essentially three basic ways in which the transportation research function can be accomplished.

First, the Provincial Government can retain private consultants to carry out the bulk of the research. Secondly, the Government can shift their research burden to the universities located within the Province. Thirdly, the Provincial Government can carry out research within the Transportation Research and Development Division or some similar body.

The approach that is being recommended within this study involves a combination of all three elements. There will first be an obvious need for a government body which will isolate problem areas, develop research projects, set up terms of reference, and in fact conduct a certain portion of the research, particularly ongoing projects such as periodic rate analyses. However, it is felt that the full-time staff requirements would be too costly and the routine matters in transportation too burden-some to allow the research function to be carried out exclusively by a government agency. Thus there will, secondly, be a need to retain outside consultants on projects which are highly specialized in nature or which require a large time and staff commitment. Rather than maintaining a full-time staff to perform such duties consultants can be called upon when required and this will result

in a considerable cost saving to the Government. Furthermore, by using outside consultants the Provincial Government will gain the extra advantage of having a "second opinion" brought to bear on specific transportation problems.

Thirdly, the resources of provincially based universities should be brought to bear where new transportation technology or new analytical techniques are involved. Based on a review of some of the unique transportation problems confronting the Province there is an obvious need for transportation centres located at one or more of the Province's universities. As an example, Alberta is strongly oriented toward the oil and gas sector and there would appear to be some pressing issues associated with the development of oil, gas and products pipelines. Alberta is in a particularly suitable position to carry out research in Arctic and sub-Arctic pipelining and should stand to benefit considerably from the work presently being performed by such groups as Gas Arctic and the Northwest Project Study Group. These groups can provide valuable input for university research projects and can provide the basis for an exchange of ideas between the university and the business community.

II Partial List of Recommendations for Further Study

The Province of Alberta is anxious to pursue courses of action designed to accelerate secondary industrial development within the Province. The first study performed by LaBorde Simat Ltd. isolated and described the major impediments to economic growth occasioned by the transportation system. Furthermore, the study uncovered certain disincentives perceived by the private industrial sector in either locating in Alberta or in expanding their existing manufacturing bases already located in the Province.

LaBorde Simat Ltd. recommends that further studies be initiated immediately along two parallel, although not totally intertwined tracks of inquiry. First, we suggest that the Government begin a number of specific studies designed to correct weaknesses in the transportation sector which were revealed as the result of the initial study just completed. Second, the basic scope of the initial study should be broadened to investigate impediments to industrial growth which may exist in other sectors of the economy.

A. Further Transportation Studies

(1) LaBorde Simat Ltd. recommends that a study be initiated to investigate in detail the

discriminatory freight rate and passenger fare structures and levels which affect Alberta. The ultimate objective would be to develop a step by step action program for the Provincial Government to pursue and to provide a factual basis upon which the Province can negotiate with the Federal Government and the transportation industry respecting specific fare and rate problems.

The proposed study would include comparisons of groups of rates with statistical analyses of the corrective and non-corrective difference in rates. Cross-sectional analysis would be used to isolate and describe correctable differences between groups of rates which vary due to such factors as:

(a) Length of travel (distance).

(b) Commodity value.

(c) Direction of flow (eastbound versus westbound).

(d) Differences in service levels.

(e) Cost of service differences, if any.

The analysis would also consider fare and rate problems that have arisen due to Government policies and the basic rationale for such policies will be

evaluated within the context of present-day needs and issues.

The study would consider all modes of transportation.

2. A study to review the present and future needs of Alberta communities for improved air services and facilities in order to set in motion an action course for improvement wherever justified. Service requirements would include intra-provincial, inter-provincial, and international routes, and all significant jurisdictional problems will be considered.

3. A thorough review of the Grains Group Study should be made in order to formulate a joint transportation and agricultural policy for the rationalization of grain handling, storage, transportation, and export procedures for the Province's agricultural economy.

4. A study to examine the need for further highway development, both inside and outside the Province. Particular emphasis will be placed on the need to facilitate further development in the Province's tourist and trucking industries, to provide improved access and thus greater economic development in Northern Alberta and to

promote better surface transportation into Canada's rapidly developing Far North economy.

5. A study to examine the present regulatory framework governing truck and bus operations inside and outside the Province. This study would review the merits of increasing permissible gross vehicle weights as well as achieving a greater degree of standardization between the provinces and states in the areas of fuel taxation and licensing.

B. Broadening of the Research Base

(1) We have already determined that a number of transportation problems centred around rates, services, and regulatory policy are presently inhibiting the development of secondary industry in the Province. However, we believe that in order to place the problem and the objectives in proper focus a similar study should be launched to investigate inherent problems which may require corrective action in other areas. Particular attention would be placed on:

  (a) The availability of capital at competitive interest rates.

  (b) The supply and location of skilled and unskilled labour.

(c) The quality of life, education, housing, health, cost of living, recreation and community of interest.

(d) Barriers to entry.

(e) Prospective trade opportunities between Alberta and major foreign markets.

(f) Other industrial location factors.

(2) A detailed study to prepare alternative industrial incentive programs and one recommended program which would stimulate new industrial development within the Province without inflicting undue hardship upon existing firms or drastically upsetting the market mechanism.

APPENDIX A

ALBERTA TRANSPORTATION STUDY

QUESTIONNAIRE

(1) Name of firm: ______________________________

Address: ______________________________

____

(2) In what type of business is your firm engaged:

____

(3) How many people does your firm employ: __________

(4) What products does your firm manufacture or produce:

____

(5) In what markets does your firm sell its product:

____

(6) Approximately what percentage of your firm's products are marketed inside and outside of Alberta:

Inside Alberta __________%

Outside Alberta __________%

(7) What was the approximate value of sales for your firm in 1969 and 1970:

1969: ______________________

1970: ______________________

(8) Do transportation costs occupy an important position in the final price of your product: Yes ______ No ______

(9) To what extent does your firm employ the different methods of transport to ship its product. Please indicate by numbering in descending order of importance.

Rail ( )
Air ( )
Truck ( )
Other (please specify) ______________ ( )

(10) Do you feel that your firm's ability to market its product is being unduly restricted by the transportation element. Yes _____ No _____

(11) If your answer in (10) is <u>Yes</u>, please explain.

____

____

(12) If your answer in (10) is <u>Yes</u>, which of the following factors or combination of factors is likely the major cause. (Please check)

(i) Freight rates ( )
(ii) Lack of adequate transportation facilities ( )
(iii) Regulatory policy ( )

Please explain: ______________________________

____

(13) What action do you feel is necessary to rectify this situation: ______________________________

____

____

(14) What are the major inputs used in the manufacture of your firm's product: ______________________________

____

____

(15) Approximately what proportion of your firm's inputs originate inside and outside of Alberta.

Inside Alberta ____________ %
Outside Alberta ____________ %

(16) Where does your firm obtain its inputs: ____________

____

____

(17) Do you feel that the cost of transporting these inputs adds unduly to the cost of manufacturing your firm's product. Yes ____ No ____

(18) If your answer in (17) is <u>Yes</u>, please explain:

____

____

____

(19) If your answer in (17) is <u>Yes</u>, which of the following factors or combination of factors is likely the major cause. (Please check)

(i) Freight rates ( )
(ii) Lack of adequate transportation facilities ( )
(iii) Regulatory policy ( )

(20) What action do you think is necessary to rectify this situation: ____________________________

____

____

(21) Does your firm own and/or operate its own fleet of trucks or other method of transport (please specify)

____

____

(22) Who do you consider to be your major competitors and where are they located: ______________________________

____

____

(23) Do you have any additional comments concerning the transportation element and how it relates to your firm: ______________________________

____

____

____

____

A P P E N D I X   B

ALBERTA TRANSPORTATION STUDY QUESTIONNAIRE

Please be assured that the information you provide will be kept in strictest confidence.

(1) Name of Respondent: ______________________________

Position: ______________________________

Address: ______________________________

(2) What types of commercial transport presently serve your community.

Railway - Passenger	( )
- Freight	( )
Commercial Airline - Passenger	( )
- Cargo	( )
Passenger Bus	( )
Truck	( )
Other (please specify) ________________	( )

(3) With reference to your own community, has the level of passenger and/or freight service been reduced within recent years? If so, please indicate the type of transport involved and explain the extent to which service has changed.

____

____

____

(4) Do you feel that there is an adequate level of passenger service at your community. Please answer yes or no where applicable:

Rail	Yes( ) No( )
Air	Yes( ) No( )
Bus	Yes( ) No( )
Other (please specify) ____________	Yes( ) No( )

(5) If you answered no anywhere in (4), please describe the present level of service and indicate the improvements that you would like to see implemented.

____

____

(6) Do you feel that there is an adequate level of freight service at your community. Please answer yes or no where applicable:

Rail	Yes ( )	No ( )
Air	Yes ( )	No ( )
Truck	Yes ( )	No ( )
Other (please specify) ____________	Yes ( )	No ( )

(7) If you answered no anywhere in (6), please describe the present level of service and indicate the improvements that you would like to see implemented.

____

____

____

(8) With reference to your own community, do you know of any instances where industry was prevented from establishing or developing because of the transportation factor. If so, please indicate the company or companies involved and describe the particular circumstances:

____

____

____

(9) With reference to (8), please indicate the transportation improvements which you think are required to alleviate any of the problem(s) cited therein. When answering this question, please specify the particular transport mode.

____

____

____

(10) Would you describe any urban transportation problems which relate to your community - roads, rapid transit, taxi services, etc.

____

____

____

(11) With reference to (10), please indicate any projects that have been proposed or are presently under way to alleviate these problems. If there is Federal or Provincial Government involvement in any of these projects, please specify:

---

(12) What improvements do you think should be implemented to rectify the problems cited in (10).

---

(13) With regard to your own community, can you think of any areas of transportation where the Provincial Government could be of assistance:

---

(14) Do you have any further comments pertaining to transportation and how it affects your community:

APPENDIX C

ALBERTA TRANSPORTATION STUDY

QUESTIONNAIRE

Please be assured that the information you provide will be kept in strictest confidence.

(1) Name of firm: ______________________

Address: ______________________

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(2) In what type of business is your firm engaged:

____

(3) How many people does your firm employ: __________

(4) What products does your firm manufacture or produce (A brief description will be sufficient):

____

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(5) What was the value of sales for your firm in 1969 and 1970:

1969: ______________________

1970: ______________________

(6) In what markets does your firm sell its product(s):

____

____

(7) In 1970 what was the value of your firm's sales in each of the following markets:

Eastern Canada ______________________

Western Canada ______________________

Other (please specify) ______________________

____

(8) In 1970 what was your firm's value of sales in Alberta (approximately);

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(9) Has your firm ever considered establishing a plant or production unit in Alberta:

Yes ____________________

No ____________________

(10) If your answer in (9) is <u>Yes</u>, could you indicate whether your firm still considers Alberta as a possible plant location and the reasons why:

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(11) If your answer in (9) is <u>No</u>, could you indicate the reasons why your firm has decided against or has never considered Alberta as a plant location:

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(12) What inputs does your firm use in its production process:

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(13) Where does your firm obtain its inputs:

____

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(14) Do you feel that the transportation factor has been an important reason for your firm not establishing a plant in Alberta: Yes ____ No ____

Please explain: ______________________________

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(15) If your answer in (14) is Yes, which of the following factors or combination of factors is the major reason:

(i)	Freight rates	( )
(ii)	Lack of transportation facilities	( )
(iii)	Regulatory policy	( )
(iv)	Inadequate level of service	( )
(v)	Other (please specify) ______________________	( )

Please explain: ______________________________

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(16) To what extent does your firm employ the different methods of transport to ship its product. Please indicate by numbering in descending order of importance.

Rail	( )
Air	( )
Truck	( )
Other (please specify) ______________	( )

(17). Apart from transportation, do you feel that Alberta offers any advantages to your company as a plant location, e.g. cheap fuel, market, labour supply, etc. Please explain:

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(18) Do you have any additional comments concerning the transportation element and how it relates to your firm:

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